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**DETERMINANTS OF CUSTOMER LOYALTY IN PAKISTAN'S
TELECOM SECTOR: AN EXMINATION OF DIFFERENCES
BETWEEN STAYERS AND SWITCHERS**



By

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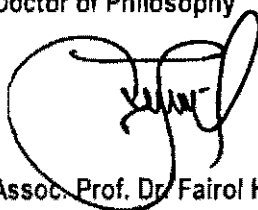
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ABSTRACT

Customer loyalty has gained foremost attention among the practitioners and the academic researchers because of its proximity to organizational growth, profit and survival. Based on existing literature, this study has highlighted a few critical issues related to the telecommunication sector in Pakistan such as the decline in subscriber growth, decrease in average revenue, and the increasing trend of users switching among the telecom operators. The objective of the present study was to analyze the impact of perceived service quality, price fairness, justice to service and relational bonds on customer loyalty with the mediating role of customer satisfaction and the moderating role of corporate image. This study also investigated the perceptions of stayer- and switcher- users on the determinants of customer loyalty. The framework of the present study was based on the Oliver Four Stage Model, the Expectancy Confirmation Model and the Principles of Reciprocity. Data for the current study was collected from 539 prepaid subscribers based in four major capital cities of Pakistan through questionnaires by adopting the proportionate stratified random sampling. The collected data was analyzed by using SPSS version 23 and the Smart PLS Structure Equation Modeling (PLS-SEM). The findings of the study revealed that perceived service quality and customer satisfaction are the main driving forces to customer loyalty. Moreover, customer satisfaction successfully mediates perceived service quality, price fairness, justice to service recovery and relational bonds. However, corporate image does not moderate the relationship between customer satisfaction and customer loyalty. Meanwhile, perceived service quality and relational bonds to loyalty relationship are important to the stayer- users, while price fairness and justice to service recovery are important to switchers. The present study has also suggested some theoretical and practical contributions.

Keywords: Customer loyalty, service quality, stayers and switchers, telecom sector.

ABSTRAK

Kesetiaan pelanggan telah mendapat perhatian utama dalam kalangan pengamal dan penyelidik akademik disebabkan perkaitan rapatnya dengan pertumbuhan, keuntungan dan kelangsungan sesebuah organisasi. Berdasarkan sorotan karya sedia ada, kajian ini telah mengetengahkan beberapa isu kritikal berkaitan sektor telekomunikasi di Pakistan seperti penurunan pertumbuhan pelanggan, kemerosotan pendapatan purata dan peningkatan trend peralihan pengguna dalam kalangan pengendali telekom. Objektif kajian ini adalah untuk menganalisis kesan kualiti perkhidmatan yang ditanggap, keadilan harga, keadilan perkhidmatan dan bon perhubungan dengan kesetiaan pelanggan dan peranan pengantaraan kepuasan pelanggan dengan peranan penyederhanaan imej korporat. Kajian ini juga telah menyelidik persepsi stayer dan switcher terhadap penentu kesetiaan pelanggan. Rangka kerja kajian ini adalah berdasarkan Oliver 4 Stage Model, Expectancy Confirmation Model dan Principles of Reciprocity. Data kajian dikumpulkan dari pelanggan mudah alih prabayar yang berpusat di empat bandaraya utama di Pakistan. Soal selidik diedarkan dalam kalangan 539 orang pelanggan prabayar berdasarkan persampelan rawak berstrata berkadar. Data dianalisis menggunakan SPSS dan Pemodelan Persamaan Struktur PLS Pintar (SEM-PLS). Dapatan kajian menunjukkan bahawa kualiti perkhidmatan yang ditanggap dan kepuasan pelanggan sebagai daya pemacu utama kesetiaan pelanggan. Selain itu, kepuasan pelanggan berjaya mengantarakan hubungan di antara kualiti perkhidmatan yang ditanggap, keadilan harga, keadilan dengan pemulihan perkhidmatan dan hubungan bon. Walau bagaimanapun, imej korporat tidak mengantarakan hubungan di antara kepuasan pelanggan dengan kesetiaan pelanggan. Sementara itu, kualiti perkhidmatan yang ditanggap dan perhubungan bon terhadap hubungan kesetiaan adalah penting kepada stayer, manakala keadilan harga dan keadilan dengan pemulihan perkhidmatan didapati penting untuk pengguna switcher. Kajian ini turut mencadangkan beberapa sumbangan teoretikal dan praktikal.

Kata Kunci: Kesetiaan pelanggan, kualiti perkhidmatan, Stayers and Switchers, sektor telekom

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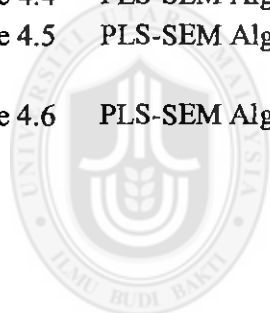
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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Over the last two decades, the world's businesses have shifted its focus from the industrial to consumer services. In terms of growth, the business category with the highest growth is Telecommunication and ICT followed by Banking and other services sector, which recorded a 6% annual growth rate between 2008 and 2016. The telecommunication sector is a distinctive industry in many ways, particularly as it has undergone tremendous changes since its inception in 1875. In fact, it is not exaggerating to state that the industry has played a vital role in many ways. It has contributed significantly towards the National GDP as it has become a major source of employment. Furthermore, ICT has also helped the preservations of social ties among people across the globe (Galperin & Mariscal, 2007; Nimako, 2012; Shrivastava & Israel, 2010). In this regard, Since the early 1990s, the global demand for mobile communication services, including voice telephony; text messaging and mobile internet access have grown substantially (Lange & Saric, 2016). This increasing global demand for MCS (Mobile Communication Services) has started a stiff rivalry between different mobile network providers (MNP) as newcomers compete to break the long-standing monopoly of a particular service provider in the sector in countries (Savin, 2017).

On the other hand, the market development of mobile communication service is often measured through the level of market penetration over the last few years (ITU, 2017b). There are more than 7.50 billion active cellular subscriptions, representing a penetration rate of more than 97 % globally (see figure 1.1). The largest proportion of

subscriptions has been recorded in CIS (Common Wealth Independent States) followed by European countries and America.

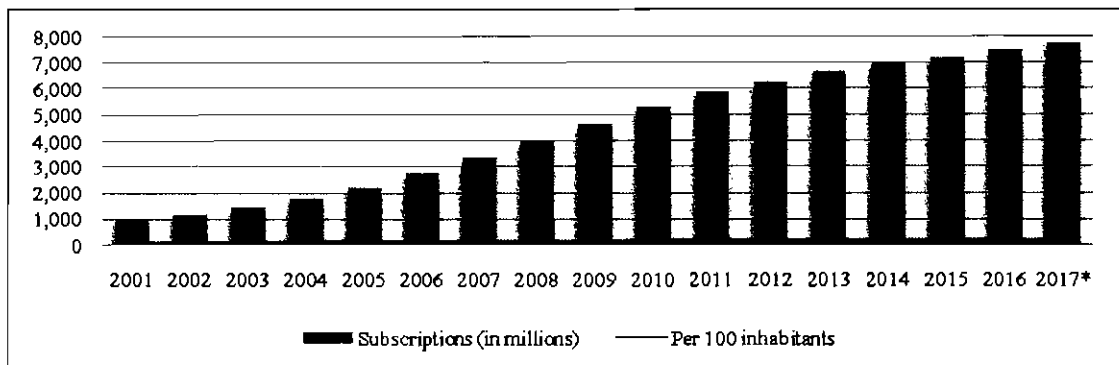


Figure 1.1
Global mobile/cellular subscription

Source: ITU world Telecommunications / ICT indicator data base

Figure 1.1 illustrates the gradual increase in the global mobile subscriptions from 2001 to 2017. The same increase rate is expected in the coming years, highlighting the importance of cellular mobile services in the lives of people around the globe ITU (2017b). In this regard, the ITU (2017a) report highlighted that developing countries, which are homes to 83% of the global population, have generated 39% of the world's telecommunication revenue. According to the report, at present, there are 30 million youths who are active online users, and youth broadband subscription has hit 4.30 billion in the past year. However, surprisingly, the revenue of the world's telecommunication industry has recorded a decline of 4% from USD 2.0 trillion in 2014 to USD 1.9 trillion in 2015.

Over the last few years, huge investment in telecom technology has laid down the foundation for the utilization of advanced digital applications, such as wireless internet, high -speed data communication and mobile communication. Moreover, the growing trends of social media adaptation particularly among the young generation have forced the telecom operators to adopt more versatile mobile communication platforms (Stevens, Gilliard-Matthews, Dunaev, Woods, & Brawner, 2017). As a result, such highly competitive situations have forced telecom operators to not only to scuttle towards attracting the new customers, but also to retain the existing pool of customers (Muturi, Jackline Sagwe, Kipkirong Tarus, & Rabach, 2013). Moreover, the tremendous growth of the sector, aggressive rivalry between telecom operators and the growing importance of customer retention has highlighted the need to explore the factors affecting the customer satisfaction and loyalty in the telecom sector (Shafei, Shafei, Tabaa, & Tabaa, 2016).

Review of past studies has shown that customer satisfaction positively affects the customer loyalty and has a significant influence on organizational growth (Gerpott, Rams, & Schindler, 2001; Irfan, Shamsudin, & Hadi, 2016). However, studies pertaining to customer satisfaction highlighted that customer satisfaction in telecom sector is declining all over the world, for example, studies of the telecom sector in the USA have demonstrated a substantial decline in the customer satisfaction in the sector compared to other service sectors (Irfan et al., 2016). In addition, the UKCSI (UK customer satisfaction index) indicated that the telecom sector recorded the lowest customer satisfaction rating among all service industries in the UK (Ellie Scott, 2016). An array of past and current studies have demonstrated that satisfied customer will stay longer with the firm and spread positive word of mouth (Inegbedion & Obadiaru,

2018). On the contrary, dissatisfied customers will communicate their negative experiences with nine to fifteen other customers, and in return, the other customers will continue this negative chain by passing on these negative experiences with more than 20 people within their social networks (TRAP, 1986). The worst result of customer dissatisfaction is when customers decide to switch telecom providers and influence other people in their social circle to switch. Such actions will generate negative words of mouth against the service provider.

The customers' habit of switching service providers is more prevalent in the telecommunication sector because dissatisfied customers will need not to worry about the losing their numbers as they are able to request to switch service providers through MNP facility (Irfan et al., 2016). The Mobile Network Portability (MNP) allows subscribers to change their telecommunication networks and retaining the same phone number. The implementation of MNP has increased the number of subscribers who voluntary switch to other telecom providers due to their bad experience with the previous telecom operators. The MNP was firstly introduced in the USA in 2004 to provide users with the ability to switch network operators. Past studies regarding customer switching trends in mature industries like telecommunication have predicted that the rate of switching rate will increase by around 20% to 40% annually (AKMAL, 2017). In the similar vein, Hughes (2007) highlighted that the annual churn rate for telecommunication firms lies between 10 to 67% while Aydin and Özer (2005) mentioned that on average, each telecom operator will loss around 2% to 4% customer per month, and such customer disloyalty will cost millions to the firms in the long run. Therefore, the attainment of customer

satisfaction is crucial because it will enable telecommunication firms to gains' customer loyalty and to decrease customer switching.

Customer loyalty has occupied the most prominent place in marketing theories and practices (Berry, 1995; Oliver, 1999) and as a field of research, customer loyalty remains the major area of concerns for the marketing practitioners and academic researchers (Grönroos & Helle, 2012; Gummesson & Grönroos, 2012; Izogo & Izogo, 2017; Raval & Grönroos, 1996; Reichheld & Teal, 1996; Toufaily, Ricard, & Perrien, 2013) due to its close link to profitability (Hallowell, 1996; Pitta, Franzak, & Fowler, 2006; Reichheld & Sasser, 1990a), organizational survival and growth (Bennet & Bennet, 2004; Pitta et al., 2006). Marketing academicians and practitioners have mentioned that the strategic goal of the organization lies in the enrichment of customer loyalty (Han & Hyun, 2012; Harris & Goode, 2004; Shafei et al., 2016; Toufaily et al., 2013).

In the meantime, some researchers elaborated that once customers become loyal, their purchasing behavior will be changed accordingly and they tend to purchase more, become loyal advocates to the brand and become passionate to spread the positive word of mouth about the brand others. This, in turn, will create positive repeated purchasing behaviors (Abubakar, Mokhtar, & Abdullattef, 2013; Harris & Goode, 2004; Oliver, 1999). Therefore, the attainment of customer loyalty is fruitful for both the firms and the customer (Berry et al., 2010; Grönroos & Helle, 2012). Based on the aforementioned benefits, modern day firms are trying hard to attain and build the customer loyalty by considering it as an essential part of the business (Kiyani, Niazi, & NIAZI, 2012; Morgan & Govender, 2017a; Muturi et al., 2013; Toufaily et al., 2013).

The attainment of customer loyalty is more prevalent in a competitive industry like the telecom industry due to the large customer base and frequent switching tendencies among telecom subscribers. Consequently, loyalty in the telecom sector can be achieved through fair treatment, superior service quality, mutual trust, satisfaction and development of commitment with telecom operators (Han, Kwortnik Jr, & Wang, 2008; Yusoff, Wahid, & Alias, 2017). It was argued that customer loyalty should be aligned with organizational strategic planning and strategic marketing plan at the macro or micro level which could be used strategically for the attainment of customer satisfaction and loyalty (Oly Ndubisi, 2007a; Yusoff et al., 2017). In addition, some marketing scholars considered customer loyalty as one of the most significant relationship marketing tool that has the ability to not only to keep customer loyal for a longer period of time but also enables the customer to spread positive word of mouth and willingness to recommend the service provider to others (Chinomona & Sandada, 2013; Saleem, Yaseen, & Wasaya, 2018).

As the telecom sector is operating in a hypercompetitive environment, customer loyalty will serve as the best source of continuous business growth and sustainability (Keiningham, Aksoy, Cooil, & Andreassen, 2008). Hong and Cho (2011) posited that customer loyalty refers to customers' psychological and attitudinal attachments towards their service providers. In this regard, Deng, Lu, Wei, and Zhang (2010) highlighted the fact that customer loyalty positively shapes the mind of the customer where loyal customers will not be easily influenced to choose alternative offers or to believe in publicity. Similarly, Boshoff and Du Plessis (2009) asserted that retaining old customers is less expensive as they are not price sensitive and could freely spread positive words of mouth. Tariq, Awan, and Ghouri (2014) also mentioned that

customer loyalty would ensure profit earning even in a hypercompetitive environment.

Recently, contemporary researchers like Domb, Sujata, Sanjay, Arindam, and Jypti (2018) and Joshi (2014) posited that customer experience management is mandatory in the telecom sector to understand how customers respond towards various antecedents of loyalty. These authors believe that such actions will help to properly identify the customers' needs and wants. Similarly, Kotler (2012) argued that customers share unique needs in different segments and expect similar treatments in these segments. In this regard, several well-known studies in the telecom sector proved that there are significant differences between prepaid and postpaid customers (Aydin & Özer, 2005, 2006; Lee, Murphy, & Dickinger, 2006; Santouridis & Trivellas, 2010) as they require different elements to develop customer satisfaction and loyalty. In this regard, some researchers categorized customers into two segments, stayers (who never switched to any other service provider) and switchers (who recently joined the service provider by switching from other service provider) (Ganesh, Arnold, & Reynolds, 2000; Moreira, Silva, & Moutinho, 2016; Peng & Wang, 2006). Significant differences among these groups were also empirically revealed by several telecom studies in different countries such as Australia (Stein & Ramaseshan, 2015), Portugal (Moreira, Silva, & Moutinho, 2016) India (Shukla, 2014), Bangladesh (Hasan & Abdullah, 2013) and Turkey (Ulubaşoğlu, Şenel, & Burnaz, 2017).

The telecom industry in Pakistan is one of the fastest developing commercial ventures in the nation in the past decade. The improvements in technology and intense nature of rivalry have made this industry more competitive. This intense competition has

widened the alternative options to subscribers, and now customers can enjoy better and improved services than the past at more affordable prices. Therefore, a mixed trend is observed in the growth of subscribers and revenues over the past few years. Figure 1.3 illustrates the growth of subscribers from 2003-2016 and reflects that the largest transaction was recorded between 2003-2007 and a linear growth could be observed from the 2007-2013 period. Meanwhile, the number of subscribers has shown inconsistent growth from 2013 to 2016, and the situation is far from control as shown by the high rate of customer switching and the availability of cheap voice and text messages alternatives in forms of Facebook, WhatsApp and other social media tools (PTA, 2016).

The following figure shows that the nature of rivalry in this sector is very intense between five telecom operators; Mobilink (now operating as JAZ after the merger of Warid), Telenore, Ufone, Zong and Warid. Despite the recent merger between Warid and Mobilink which made Mobilink the market leader with a 39% share in the market, over the years, Mobilink has lost its market share from 29% to 28% while other service providers such as the Telenore has gained 25% to 27%, and Zong has increased its market share from 17% to 20%. On the other hand, the market share of Ufone has decreased from 19% to 16%, and the market share of Warid has significantly dropped from 10% to 8% (PTA, 2016).

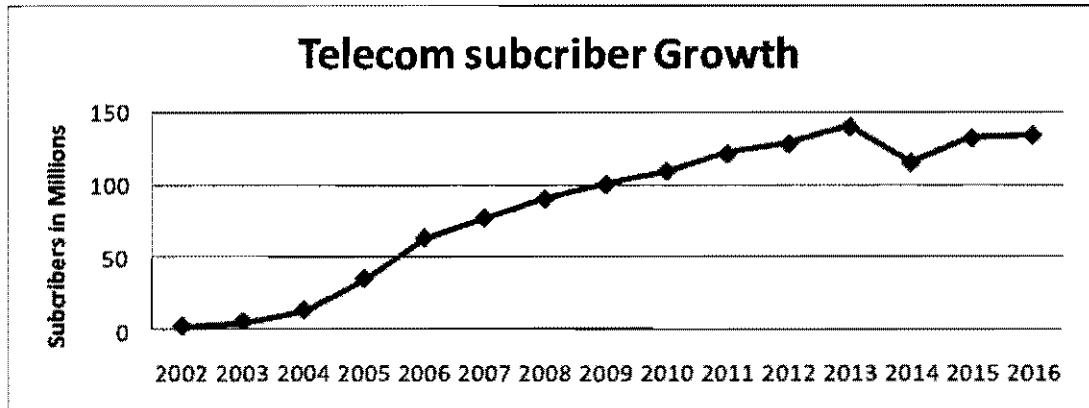


Figure 1.2
Subscribers Growth in Pakistan Telecom sector
 Source: (Anjum et al., 2017; PTA, 2016)

In the meantime, the telecom sector has earned Rs. 449.6 billion between July 2014 to June 2015 while the sector has earned Rs. 333.2 billion 2015-2016. In this regard, the telecom sector contributed \$105.92 billion in the first three quarters of FY2016 compared to \$126.6 billion between 2014-15. This indicates a declining trend and less investment as only \$719.7 million were invested in 2015-16 compared to \$107.11 million between 2014-2015 (PTA, 2014, 2015, 2016).

The average revenue per user (ARPU) is another important indicator of sector progress. Review of the past years' performance reveals that the revenue for each MB revenue has declined 63% in the last two years (Atta, 2016). Per MB data revenue in 2016 was 0.20\$ compared to 0.25\$ in 2015 and 0.55\$ in 2014, respectively. These statistics show a substantial decline in the per MB data revenues. Besides, there was a substantial decrease in the data revenues despite the rapid hike of mobile data usage. According to PTA (2016), there is an incredible 1631% increase in the data usage while data revenues only increased up to 84 % in the last two years.

These figures also show the unsatisfactory returns of data usage as depicted in the following table

Table 1.1
Data usage and Revenue Disparities

	June 2015	June 2016	June 16 Vs. June 2014
Data Usage (TBs) Growth	534%	173%	1.631%
Data Revenue Growth	45%	27%	84%

Source: Pakistan Telecommunication Authority (PTA, 2016).

In this regard, Per MB revenue from all types of calls has shown a declining trend. Per MB revenue from international and national calls was Rs.1.68 in 2010-2011 while per MB revenue for 2015-16 was just Rs. 0.60, as shown in Figure 1.3. This could be caused by the dissatisfied pattern.

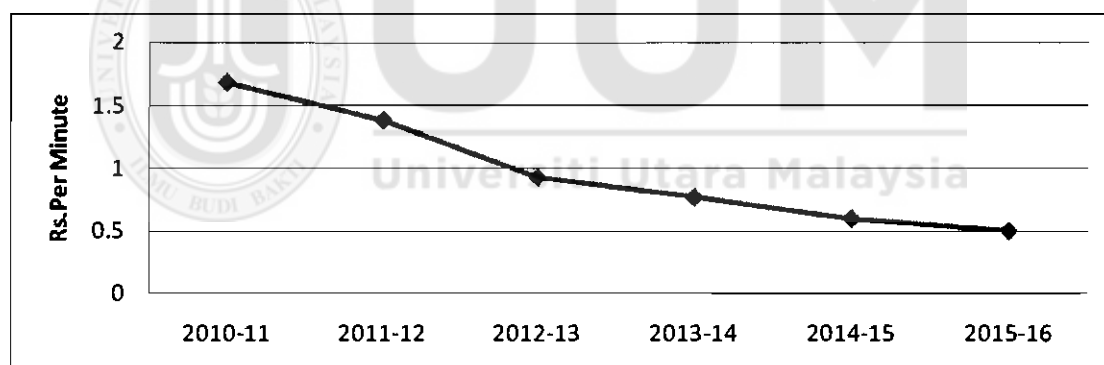


Figure 1.3
Cellular voice tariff (price) in Pakistani Rupees (Rs)
Source: Pakistan Telecommunication Authority (PTA, 2016).

In 2007, Pakistan pioneered the mobile network portability (MNP) facility in South Asia. This facility allows subscribers to switch to any telecom operator while retaining the same number. Since it's introduced, MNP has encouraged customers to switch to new telecom operators. The high rate of customer switching is evident

through the report that 30 million subscribers have switched telecom operators through the MNP between 2008-2014 (Anjum et al., 2017; PTA, 2014). As this sector is already in the transformation phase, the rapid increase of switching has significantly influenced the nature of rivalry among telecom operators. Consequently, Telenore has surpassed Mobilink's market share while Zong has become the third fastest growing network in the country. On the other hand, Ufone has lost its market position, and Warid lost half of its market share because of customers switching to their competitors (PTA, 2015).

More than eighty percent of the population in Pakistan subscribes to telecom services, but the number of complaints has also increased over time as the telecom sector is dominated by mobile service providers and fixed line services. Therefore, 99% of complaints are related to these two dominated segments. In the cellular segment, a majority of complaints are related to illegal practices and misuse of services (PTA, 2016). During the fiscal year of 2015-16, the Pakistan Telecommunication Authority has received 22,866 complaints against telecom operators in 2016. The highest complain was recorded in FY2015 with 24,510 cases, 22,271 cases in FY2014 and 17,948 cases in FY 2013 (PTA, 2013, 2014, 2015, 2016). In this light, the increasing trend observed in the complaints against the operators reflects the incompetence of telecom operator's service to respond to the complaints.

Based on the above discussion, it can be observed that customer satisfaction and customer loyalty have significantly impacted customer loyalty. Moreover, past empirical studies have shown a significant decline in customer loyalty due to customer switching through MNP facility followed by the decline in the average revenue and subscribers' growth. Furthermore, the increasing trend of complaints

against the operators reflects the inefficiencies of service quality, particularly poor recovery mechanisms. In addition to that, theoretical domains of customer loyalty are still unclear. Therefore, further studies are required to reveal the most significant predictors of customer loyalty and to examine the differences among customer various segments in order to comprehend their need and wants. Most importantly, as proposed by Pan, Sheng, and Xie (2012) customer loyalty needs to be re-examined in multiple combinations of direct and in-direct relationship in order to identify the most significant predictor of customer loyalty.

1.2 Problem Statement

A deeper understanding of customer loyalty in the telecommunication sector is essential because it will ensure the long term business growth and survival of a firm. However, there is an apparent inconsistency among marketing researchers and academicians on the grounds of conceptualizing the most significant predictor of customer loyalty. Moreover, studies on customer loyalty in Pakistan have mainly conducted in the Banking industry (Hafeez & Muhammad, 2012; Khan & Fasih, 2014; Rasheed et al., 2015), Hospitality (Ashraf & Manzoor, 2017; Khan, 2013; Saleem & Raja, 2014; Ullah, Raza, & Chander, 2016), Air line (Baloch & Jamshed, 2017), Health (Malik, Asif, & Malik, 2012) and the FMCG industry (Ishaq, Bhutta, Hamayun, Danish, & Hussain, 2014; Zaman, Bibi, Arshad, & Shahzad, 2012).

The fierce competition and the high rate of switching among telecom have clearly signified the lack of loyalty among the telecom subscribers which can be clearly seen from the increasing trend of customer switching through MNP facility. In this regard, PTA (2014) report has highlighted that approximately 30 Million Pakistani mobile

subscribers have been switched to different networks during the 6 years (2008-2014). Moreover, similar phenomenon is rightly addressed by Anjum et al. (2017) in their study by affirming that “Churn is still the biggest issue of the competitive telecom market of Pakistan as none of the company surveys achieved 75% coverage of the churn. In Pakistan, more than 40 million subscribers go unpredicted”. In a nutshell, Telecom operators have lost substantial market shares due to the customer switching in the telecom sector. These huge prevailing switching trends among subscribers and inconsistencies in the various market segments are reflecting the lack of customer loyalty among the mobile phone subscriber in Pakistan telecom sector.

On the other hand, even though it is important to note that not all customers are alike (Peppers & Rogers, 2016; Venter, Wright, & Dibb, 2015), there is little awareness on how and why they differ (Heinonen & Strandvik, 2015). In this regards, various studies were conducted to examine the differences between various customer segments like Prepaid & Postpaid, and a variety of studies were conducted on customers’ demographic profiles (Agyei & Kilika, 2013; Ishaq, 2011; Izogo, 2016; Prasad & Mishra, 2014; Qayyum, Ba Khang, & Krairit, 2013; Shafei et al., 2016; Yeboah-Asiamah, Nimako, Quaye, & Buame, 2016). The results of these studies have empirically verified the significant differences between prepaid and postpaid mobile subscribers towards various antecedents of loyalty. On the contrary, contemporary researchers like Moreira, Silva, and Moutinho (2016) have examined the differences in customers’ perceptions from the perspectives of two emerging groups, customers who switch from other service providers and other those who have never changed their service providers (i.e. switchers and stayers-first-time adopters). In addition, Moreira, Silva, and Moutinho (2016) argued that investigating telecom subscribers

from these two grouping can be more productive due to the increasing switching trends in the telecom sector and the empirically driven differences between these two customer segments (switchers & stayers). However, research in this area is still in infancy.

Studies on the manifestation of various antecedents of loyalty, like satisfaction, brand image, switching cost, service quality, pricing structure, switching barriers, commitment, perceived value, corporate image, trust, relationship marketing, sales promotion, relationship quality, social pressure, brand reputation, call rate quality, network quality, customer service, trustworthiness, equity, corporate social responsibility and service value (Abdullah, Putit, & Teo, 2014; Abrar & Nasir, 2013; Adjei & Denanyoh, 2014; Ahmad, 2011; Ali & Muqadas, 2015; Chang & Chong, 2011; Cudjoe, Anim, & George, 2015; Goyal, Maity, Kaur, & Soch, 2013; Izogo, 2016; Muturi et al., 2013; Ogunnaike, Salau, Sholarin, & Borishade, 2014; Ram, Ram, Wu, & Wu, 2016; Rashmi & Krishnakumar, 2015; Shafei et al., 2016; Yeboah-Asiamah et al., 2016) have demonstrated examinations of the antecedents and this large number of antecedents denote the lack of agreement among academic researchers. Moreover, it embodies the mixed trends in the customers' behavioral and attitudinal responses towards antecedents of loyalty in the telecom sector. The lack of consensus is confined to the most significant antecedent of loyalty while some antecedents of loyalty e.g., satisfaction, trust, value have been over-examined in various research. This shows that the power of these antecedents on loyalty is unassertive (Ball, Simões Coelho, & Machás, 2004; Chen & Cheng, 2012; Kuikka & Laukkanen, 2012; Richard & Zhang, 2012), forcing researchers to incorporate the other antecedents of loyalty. To fill this gap, the current study will investigate the

impacts of the least considered antecedents of loyalty i.e. price fairness, perceived justice with service recovery and relational bonds.

Service quality, relationship bonds, perceived price fairness and perceived justice with service recovery are the major antecedents of customer loyalty used to gain a competitive advantage in the highly competitive industries (Olatokun & Ojo, 2016; Piaralal, Piaralal, & Bhatti, 2014; Reavey & Suri, 2015; Shammout, Polonsky, & Edwardson, 2007). Same as Telecommunication Sector (Awa, Ogwo, & Ukoha, 2014; Bassey, 2014; Cheung, Cheung, To, & To, 2016; Thakur & Singh, 2011) but majority of these studies revealed mixed findings.

To date, it is ironic and paradoxical to note that within this extent of literature, unanimity on the relationship between perceived service quality and customer loyalty is still lacking. As a result, the findings of various studies on perceived service quality and customer loyalty are still inconclusive (Alam, Roy, & Akther, 2016; Aydin & Özer, 2005; Hassan, Hassan, Nawaz, & Aksel, 2013; Izogo, 2016; Kushwah & Bhargav, 2014; Mokhtar, Maiyaki, & Mohd Noor, 2011; Nimako, 2012; Santouridis & Trivellas, 2010; Yuktanandana & Prasertsakul, 2015). Hence, based on is disagreement further empirical investigation is required to comprehend the underlying phenomenon.

Nazari, Hosseini, and Kalejahi (2014) argued that perception of price fairness has received less attention as compared to other marketing concepts. Moreover, the findings of the previous studies have revealed mixed results. Many studies (Adjei & Denanyoh, 2014; Asadi, Khazaei Pool, & Reza Jalilvand, 2014; Gumussoy & Koseoglu, 2016; Hassan et al., 2013; Marina, Kartini, Sari, & Padmasasmita, 2016;

Onlaor & Rotchanakitumnuai, 2010) have confirmed the significant positive relationship between price fairness and customer loyalty, while others studies (Doong, Wang, & Shih, 2008; Hashim, 2014; Jin et al., 2016; Martin, Ponder, & Lueg, 2009; Nazari et al., 2014) have revealed insignificant relationship. Therefore, the relationship between price fairness and customer loyalty is still required further empirical investigations on the more diverse groups of people and population as endorsed by (Nazari et al., 2014).

Perceived justice with service recovery resulted also in the same outcome, as it revealed significant results in few studies (Choi & Choi, 2014; Lee, Joshi, & Kim, 2011; Migacz, Zou, & Petrick, 2017; Nadiri, 2016a) as compare to other studies that revealed insignificant findings (Aisyah Yaakob & Othman, 2016; Dayan, Al-Tamimi, & Elhadji, 2008; Primus, 2013b; Qin, Chen, & Wan, 2012). Moreover, an array of well renowned researchers like, Barakat, Ramsey, Lorenz, and Gosling (2015), A. Maher and Sobh (2014) & Jean Harrison-Walker (2012) had emphasized the need to investigate the underlying objectives of service recovery in order to get more sophisticated insights of customers responses to service failures.

Relational bonds are the most effective tools of long term relationship development. Their impact on satisfaction and loyalty have been empirically investigated in the diverse studies for example, In Banking sector (Adiwijaya, 2014a; Anil Bilgihan, Chai, Malhotra, & Dash, 2015; Mboya, Bonuke, & Chepkwony; Nath & Mukherjee, 2012), Service Sector (Lima & Fernandes, 2015), Education Sector (Abubakar & Mokhtar, 2015a, 2015b; Ziaullah, Wasim, & Akhter, 2014), Theme Parks (Wu & Lin, 2014), Hotel Industry (Sarwari, Minar, & Chowdhury, 2015; Shammout et al., 2007; Shih-Tse Wang, 2014), Retailing (Huang, Fang, Huang, Chang, & Fang, 2014; Mohd

Noor, Perumal, & Goail, 2015), E-Commerce (Gu, Oh, & Wang, 2016; Lin & Chung, 2013; Lin, Weng, & Hsieh, 2003), Brokerage House (Gu et al., 2016), B2B Market (Jouali & Chakor, 2013; Schakett, Flaschner, Gao, & El-Ansary, 2011). Regardless of the diversified importance of Relational bonds as significant predictor of loyalty, no study has been conducted in the telecom sector. This signifies the significant literature gap. Furthermore, Lima and Fernandes (2015) have recommended to conduct the future studies in other service sectors to explore relational bonds and loyalty link for the better generalizability.

Another significant gap addressed from the past study is the simultaneous examination of mediator and moderator that may affect the relationship between various exogenous variables and customer loyalty. Previous studies (Assefa, 2014; Kaura, Durga Prasad, & Sharma, 2015; Ragel & Newton, 2017; Sarkindaji, Hashim, & Abdullateef, 2015) have separately examined the mediating effects of customer satisfaction or moderating effect of corporate image between customer satisfaction and customer loyalty (Muturi et al., 2013). The current study will fill this gap by simultaneously examining the mediating impact of customer satisfaction between PSQ, PF, JSR & RB and moderating role of corporate image between customer satisfaction and customer loyalty. Therefore, this study will be amongst the pioneer for investigating the mediating role of customer satisfaction between exogenous variables (PSQ, PF, and JSR & RB) and customer loyalty and moderating role of corporate image between customer satisfaction and customer loyalty in the telecom sector.

In fact, mediator and moderators are totally different in nature and treatment of analysis. Hair, Anderson, Tatham, and Black (2010) Argued that mediators actually

facilitate the relationship between exogenous and endogenous variables, therefore mediator affect the nature of relationship between two or more construct through its intervention. While, in view of MacKinnon, Cox, and Baraldi (2012) mediator will simplify the nature of relationship among constructs. Likewise, Preacher and Hayes (2008b) confirms the mediation when a predictor indirectly affect the independent variable, through at least one intervening variable. Therefore, customer satisfaction is incorporate as the mediator because of its well proven international role in the reviewed studies and as well as to compliance with the underpinning and supporting theories. On the other hand, moderator served as the third variable which can have the ability to influence the nature of existing relationship (Hair, Anderson, et al., 2010). Moreover, Moderator takes qualitative stance such as demographic, rewards, corporate social responsibility or corporate image etc.

Irfan et al. (2016) Opine that customer satisfaction as the key factor to be considered, if telecom operators, particularly in Pakistan, wanted to survive in this highly competitive industry. Moreover, Customer satisfaction as posited by Oliver (1999) would form the affective loyalty that would further lead towards the formation of conative and action loyalty. In addition to that, reviews of the past studies have confirmed the mediating role of customer satisfaction between PSQ, PF, JSR, RB and customer's loyalty. likewise , Expectancy Confirmation theory has also affirmed the intervening role of customer satisfaction between Exogenous and Endogenous constructs Oliver (1980). Therefore, this study has integrated the customer satisfaction as mediator between exogenous variables and customer loyalty.

Corporate image is one of the major predictors of customer loyalty and capable of enhancing the value-oriented relationship with the customers. Current study has

incorporated the corporate image as the moderating variable between customer satisfaction and loyalty, which is typically introduced after observing the inconsistent relationship between predictor (satisfaction) and criterion variable (customer's loyalty). Moreover, An extensive review of literature has highlighted only one study that has empirically tested the moderating role of corporate image between customer satisfaction and loyalty in the Kenyan telecom sector by Muturi et al. (2013). Therefore, this phenomenon is presenting a significant gap in the past literature. In addition to that, Muturi et al. (2013) has strongly recommended to test the moderating role of corporate image for the better generalizability.

In this light, there is dearth of literature available that examined the Oliver's Four Stage Model, Expectancy Confirmation Model and Reciprocity Theory in the telecom sector. Oliver (1999) argued that customer loyalty is built on four successive loyalty stages; cognitive, affective, conative and action loyalty while reciprocity deals with human behaviors and most widely used in psychology and sociology. Thus, the Reciprocity Theory is applied based on the Reciprocal nature relationship between telecom service providers and the customers. If a telecom service provider delivers the best services at fair prices and demonstrating the equitable treatment in service recovery, in response customer will be loyalty. On the other hand, if telecom service provider is unable to deliver the best services and vice versa then customer will be disloyal with their operators and can switch them reciprocally. In addition to that, the study has also incorporated the Expectancy Confirmation Model to integrate the various antecedents of loyalty with customer loyalty through intervening role of customer satisfaction.

To summarize, there is really a limited number of studies that have discussed customer profiles (stayers vs. switchers) in the telecom sector. Thus, this study will focus on the Pakistani telecom sector and incorporate the least researched constructs of loyalty like relational bonds, justice with service recovery, price fairness and simultaneously examined the mediating role of customer satisfaction and moderating role of corporate image between various exogenous variables and endogenous variable. The research framework of current study has been developed following the insights from most emerging loyalty models/ theories like Oliver Four Stage Model, the Expectancy Confirmation Model and the Reciprocity Theory.

1.3 Research Questions

Based on the problems stated in problem statement, the following questions will be answered to gain better understanding of research phenomenon. The main research question is:

RQ: what are the most authentic antecedents of customer loyalty in Pakistani sector?

This study will try to answer the research question by answering:

1. What is the direct relationship between perceived service quality, perceived price fairness, relational bonds, and customer satisfaction to loyalty in the Pakistan telecom sector?
2. What is the relationship between perceived service quality, perceived price fairness and relational bonds to customer satisfaction in the Pakistan telecom sector?

3. To what extent does customer satisfaction mediate in the relationship between perceived service quality, perceived price fairness, perceived service recovery and relational bonds?
4. Does corporate Image moderate between customer satisfaction and loyalty in Pakistan telecom sector?
5. Are there any differences in the perception between two customer profiles, stayers and switchers for perceived service quality and satisfaction, perceived price fairness and satisfaction, perceived service recovery and satisfaction, relational bonds and satisfaction and customer satisfaction and customer loyalty followed by perceived service quality and loyalty, perceived price fairness and loyalty, perceived justice with service recovery and loyalty, relational bonds and loyalty and corporate image and loyalty?

1.4 Research Objectives

To answer the research questions, the following research objectives have been developed:

- 1- To examine the direct relationship between perceived service quality, perceived price fairness, relational bonds, and customer satisfaction to loyalty in the Pakistan telecom Sector.
- 2- To investigate the relationship between perceived service quality, perceived price fairness and relational bonds to Customer satisfaction in the Pakistan telecom sector.
- 3- To determine the extent to which customer satisfaction mediates the relationship of perceived service quality, perceived price fairness, perceived justice with service recovery, relational bonds and customer loyalty in Pakistan telecom

sector.

- 4- To evaluate the moderating role of corporate Image between customer satisfaction and loyalty.
- 5- To compare the differences between stayers and switchers with respect to perceived service quality and satisfaction, perceived price fairness and satisfaction, perceived justice with service recovery and satisfaction, relational bonds and satisfaction, satisfaction and loyalty, perceived service quality and loyalty, perceived price fairness and loyalty, perceived justice with service recovery and loyalty and relational bonds and loyalty, followed by customer satisfaction and loyalty and corporate image and customer loyalty.

1.5 Significance of the Study

The current research will contribute in the field theoretically, methodologically and practically. In terms of its theoretical contribution, this current study has contributed in the academic research on loyalty in several ways. This study is the first study that is focused on Pakistan telecom sector and investigates the differences between the perception of stayers and switchers on various antecedents of loyalty. This study will extend the knowledge base by filling the gaps identified by the previous studies (G.C. Pandey, 2014; Hasan & Abdullah, 2013; Moreira, Silva, & Moutinho, 2016; Shukla, 2014). Moreover, the current study focuses on the least considered antecedents of loyalty like, perceived price fairness, perceived justice with service recovery, relational bonds and corporate image which were never aligned in a single model before. In this regard, this study is ground on underpinning theories like, Oliver Four Stage Model, Expectancy Confirmation Model and Reciprocity Theory which have not been investigated together in the telecom sector.

It is also important to mention that based on the researcher's knowledge there are no studies so far that focused on the effect of antecedents of loyalty on customer profiles in the Pakistani telecom. However, several have been conducted in the diverse sectors like banking (Adiwijaya, 2014b; Yang, 2009), insurance (Bhutto & Laghari, 2012; Keegan, Teljeur, Turner, & Thomas, 2016), B2B (Williams, Khan, Ashill, & Naumann, 2011), retail (Ibrahim & Najjar, 2014), informational technology (Stein & Ramaseshan, 2015) and social networking (Gu et al., 2016).

This study also investigates the novel moderating relationship with customer loyalty in telecom sector. The extensive reviews of past studies have identified that there is only one study in telecom sector of Kenya where corporate image was examined as a moderator between customer satisfaction and loyalty. Additionally, this study has developed two separate models from the perspective of stayers and switchers which will serve as a base line for the future researches on customer profiles. In the meantime, based on the methodological perspectives, this study can be considered as the pioneer research in the area that uses sophisticated data analysis technique including structural equation modeling (SEM) in conjunction with SmartPLS and Multi Group analysis for stayers and switchers. Moreover, the mediation and moderation roles of the variables have been analyzed through bootstrapping technique.

Based on practitioners' perspectives, this current study has highlighted the importance of ensuring the customer satisfaction as it is believed that satisfied customer will continuously subscribe the services or even avail the additional services. Fierce competition and implementation of MNP have encouraged customers to switch providers if they are not satisfied with the services of telecom service provider. Recent studies on customer churns in Pakistan telecom sector revealed that network

quality and network coverage appeared are the most significant reasons for customer churn in Pakistan telecom sector (AKMAL, 2017). Meanwhile, Siddiqui, Ali, Sarki, and Khuhro (2015) conducted a survey in Pakistan and highlighted network quality, value added services and pricing strategies as the most significant factors for retaining customers' positive mindset towards various telecom providers in Pakistan.

1.6 Scope of study

Understanding consumers profiles have important implications for marketing and consumer behavior theories. Examining these areas is required in order for us to gain further hypothetical comprehension about the consumer behaviors in each segment, as well as its results on the consumer and the firm. This will also help management and policy makers in creating proof- based marketing strategies for each segment. According to Dr. Fan Yunjun, the Chairman and CEO of China Mobile Pakistan, the telecom industry has played a major role in Pakistan. Furthermore, it was reported that the high growth in broad band usage bring 1.4% increase in the GDP. That is why govt. of Pakistan is very much keen about the telecommunication sector and this sector is contributing handsomely in the economic development of the country, as well as reshaping the communication networks in the country.

The scope of this study will cover all telecom subscribers of Pakistan. In order to generalize the findings, data were collected from prepaid telecom subscribers from four major cities- one from each province of Pakistan including; Karachi (Sindh), Lahore (Punjab), Peshawar (KPK) and Quetta (Baluchistan) using the proportionate stratified sampling technique. The reason behind targeting prepaid telecom subscribers is that prepaid customers make up 98.90 percent of telecom subscribers in Pakistan and switching service providers is very common among these subscribers.

Moreover, they exhibit different behaviors and choices in terms of the services provided by the telecom service providers.

1.7 Definitions of key terms

Definitions of key terms are elaborated in the bellow section.

Category	Definition
Customer Loyalty	A deeply held commitment by customer about a product or service that customer wish to patronize continuously and consistently without considering the factors that urge customer to switch and willingness to spread the positive word of mouth followed by willingness to recommend others (Oliver,1999).
Perceived Service Quality	Perceived comparison between services performed and customer expectation (Parasuraman, Berry, & Zeithaml, 1993).
Perceived Price Fairness	Consumer's assessment and associated emotions of whether the difference (or lack of difference) between a seller's price and the price of a comparative other party is reasonable, acceptable, or justifiable (Xia, Monroe, & Cox, 2004).
Perceived Justice with Service Recovery	Customers' equitable perception about the remedies or responses initiated by the service providers against the service failure" (Choi & Choi, 2014).
Relational Bonds	The psychological, emotional, economic and structural attachments between customer and service provider, act as an driving force towards binding the mutual relationship and accomplishment of common goals(Berry & Parasuraman, 2004; Smith, 1998).
Corporate Image	Perceived goodwill of service provider in the customer's mind (Muturi et al., 2013).
Customer Satisfaction	Customer's overall evolutions pertaining to the quality of goods or service as well as the level of perceived experiences obtained from the consumption over time (Garbarino & Johnson, 1999).
Stayers and Switchers	Stayers are those customers who never switch their service providers while switchers are those customers who have been switched from other service providers (Peng and Wang (2006)).

1.8 Organization of the Study

The current study is organized into several chapters. Chapter 1 provides detailed insights about the background of the study followed by problem statement, research questions, research objectives, significance of the study, and scope of the study and definition of the key terms used in this study. Finally, the chapters conclude with the organization of the remaining chapters.

Chapter two contains the review of literature review on the past and current studies related to this. The chapter starts with the detailed orientation about the global telecom scenario followed by detailed descriptions about the Pakistani telecom sector. This chapter also provides a detailed orientation about the loyalty construct, its conceptualizations and detailed discussion on underpinning and supporting theories. Moreover, the chapter discusses all the key factors that affect the customer's loyalty and elaborates all the key independent variables used in this study along with a detailed discussion on mediating and moderating variables. Finally, systematic review on the previous studies pertaining to stayers and switchers is presented.

Chapter Three provides a detailed description of the research framework along with the diagrammatical presentation of the framework to describe the linkages between this study's constructs, as well as describing the link of underpinnings and supporting theories which anchor the research frame work and hypothesis. It also contains comprehensive descriptions about the research methodology and research process followed in this study. Next, detailed descriptions of the research design, population of the study, sample size, sampling procedure, unit of analysis, measurement and scaling issues, data collection and analysis and the processes and results derived from

the pilot study are elaborated and detailed descriptions about how to conduct the main study has been presented.

Chapter Four discusses the response rate, test for non-biased, independent t-test, common method biased, data screening and preliminary analysis through missing values, assessment and removal of outliers, demographic profiles, and descriptive analysis of latent variables. Based on the PLS approach, this chapter also highlights the findings of measurement model through construct validity and reliability analysis. Finally, the structural model relationships between exogenous and endogenous are reported.

Chapter Five discusses the findings of the study followed by their detailed discussion. Next, detailed discussion on the implications and limitation of the study are addressed. Then, the chapter ends up with recommendations for the future research followed by a comprehensive conclusion of the study.

1.9 Summary

This chapter has briefly elaborated the background of the study, provided a brief introduction of Pakistan telecommunication sector as well the critical issues and challenges faced by the Pakistani telecommunication sector. It has also presented the problem statement, Research questions, Research objectives, and the Significance of this study, the scope of the study and definitions of the key terms used in this study. Lastly, this chapter has presented how the remaining chapters will be organized.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Creswell and Creswell (2017) recommended that a literature review should review the works and research on the primary independent variables, primary dependent variables and the link between the independent and dependent variables. In this regard, this chapter aims to review the existing literature discussing the main conceptual pillars that are relevant to the topic being studied. It provides an overview of what research has been done to date, and where the current study stands in relation to this topic. The first part of this chapter provides a detailed overview of the global and Pakistani telecommunication sectors and highlights the critical issues. The second part of this chapter critically examines the underpinning and supporting theories along with the reports on the empirical applications of these theories. The third section of this chapter presents a critical review of the past and current literature on the domain of customer loyalty domain in the telecommunication sector to identify the gaps in the research. The last section of this chapter will critically probe the current literature on customer profiles (switchers and stayers).

2.2 Overview of the Telecom Sector

In today's global industrial scenario, the Telecommunication sector, in general, is facing many challenges, which are the outcomes of the political, economical and technological dramatic shifts. These challenges have significantly influenced the nature and intensity of the buyer-seller relationship in this industry. In this regard,

enormous growth has been observed in the usage of IT (Information communication technologies); according to the current statistics by CISCO (2017), the global mobile data traffic has grown by 63% in 2016 and the use of ICT has grown almost 18 folds during 2012-2016. On the other hand, as argued by Rich (2012), the telecom sector is suffering from the dramatic change in the operating environment of the industry as shown by the increasing trend in broadband users, the increase in data usage in peak times and the introduction of 4G or 5G technologies. Furthermore, CISCO (2015) forecasted that by 2017, almost half of the data comprise of broadband users, partially 4G and 5G users.

Due to the intensity of competition and breakthrough in Information Communication Technology (ICT), the pace of competition is dramatically inclined towards Over-The-Top Players (OTT) offering free apps and streaming contents to the subscribers directly through the internet (Bahjat El-Darwiche, 2017). These strategies have increased their dominance in this sector. Some argued that these players are disrupting the core voice and messaging services of telecom operators, as more than 80% of messaging traffic are already dominated by services like Whatsapp, Viber, and Apple's iMessage services, and Skype which contribute to one third of voice international traffic. As a result, many telecom operators are facing a significant decrease in their market share. It was reported that telecom companies have suffered 30 percent decrease in the revenues from SMS, 20 percent decrease in international voice traffic and 15 percent decrease in penetration (Bahjat El-Darwiche, 2017).

The telecom industry is operating in a hyper competitive market with 1.71 billion subscribers around the world with its target market entailing 80% of the world's population (Muhammad, Shamsudin, & Hadi, 2016). In this regard, employing the

effective strategies is essential to survive in this competitive environment where subscribers have access to many alternatives (Nimako, 2012). Moreover, together with low switching barriers the industry, the most imperative challenge is to retain the customer and maintain the continuous business growth in the future (Haro Vicente & Sun, 2015). Review of past studies on the telecom sector worldwide has recommended that customer satisfaction and loyalty have significantly contributed to business performance and growth (Izogo, 2016). However, the telecom industry is suffering from the decline in customer satisfaction and retention. This is evident in the USA and some parts of European countries where customer penetration and satisfaction rate in the telecom sector are lower than in other sectors (Muhammad et al., 2016).

The telecom sector has also seen an increase in customer switching rate. In the USA, Verizon wireless has recorded the monthly customer churn rate of 1.19%, followed by AT&T 1.35%, Sprint 2.81%, T-Mobile USA 2.22%, US cellular 1.69% and Shantel 2.04% (Statista, 2016). Similar switching trends have been recorded in other parts of the world. Customer loyalty in the telecom sector is also changing due to the intense nature of competition and the availability of alternative options (Statista, 2016). Customers switching in the telecom sector is a global phenomenon as shown in a study by Verbeke, Dejaeger, Martens, Hur, and Baesens (2012) which reported that the annual switching rate of the global telecommunication industry is 25%. As a result, telecom providers in the USA and Europe have suffered \$ 4 billion annually due to customer switching between telecom operators. Moreover, Dhamdhare (2016) mentioned that there is a high rate of customer churning averaging between 10% and 67% annually. The widespread problem can be understood from the fact that

roughly 75% of the 17 to 20 million subscribers signing up with a new wireless carrier every year are coming from another wireless provider.

Global Telecom Study (EY, 2016) reported that telecom sectors in different parts of the world are facing a strong competition and it is expected to increase further by 2020. However, the nature of competition is different across the globe. The performance of the telecom sector is more productive in the western part of the world than east but there is a stiff competition in this part due to the intense nature of rivalry among the telecom operators. Moreover, the report has highlighted some important challenges for vision 2020 including, disruptive competition, better customer experience management, costs control and network quality, fair competitive price structures, cross selling, improvements in infrastructures, value addition in services and worldwide corporate alliances.

Likewise, the Malaysian Communication and Multimedia Commission (2016) reported that, in Malaysia, there are 43.5 Million mobile phone subscribers with the penetration rate of 140.9 percent per 100 habitants. These statistics show a phenomenal growth of telecom in this part of the world. Similar to western countries, telecom operators are facing high switching rates, along with the regulatory issues like network quality, customer complaint management etc.(MCMC, 2016). Similar trends have been observed in the Indian telecom sector which is dominated by five private operators and one government operator. The Indian telecom sector has shown substantial growth where it reached 10222.61 million in the second FY in 2016. In this light, India has the second largest telecom sector and at the third largest number of internet users in the world. Customer switching and unfair price practices have also been observed in the sector despite India being a country which provides the cheapest

call facilities. A lot of improvements are required in network quality, fairness issues in prices and customer complaint handling as well as the fair competition among telecom operators (IBEF, 2016).

More than sixty seven percent of telecom service subscribers live in developing countries (EY, 2016). This high percentage of telecom penetration rate reflects the importance of telecom related services for the people in this part of the world. In many developing countries, the telecom industry is at the maturity stage, (Atta, 2016). In this situation, new customer acquisition is relatively difficult due to the stiff competition so now the main focus is on customer loyalty (Izogo, 2016). However, it is harder to retain customer loyalty because of the intense competitions, lower tariffs and importantly, the introduction of the MNP (Mobile Number Portability) facility which makes it easier for customers to switch to other service providers while using the same mobile number (Anjum et al., 2017).

The scenario in Pakistan is not different from the situation in other parts of the world. Telecommunication facilities in Pakistan are available since 1947, after the independence of the country. In those days, telecommunication services were performed through Pakistan post & Telegraph (P&T). Importantly, a major reform occurred in 1962, when (P&T) was split into two separate departments i.e. Pakistan post and Pakistan post and telegraph (PT& T). Subsequently, on 5th December 1990, the PT&T department was merged into a new department called Pakistan telecommunication corporation (PTC). Another major step was taken by the Government. By establishing the Pakistan Telecommunication limited PTCL (government owned corporation) in January 1996. The PTCL was officially responsible to govern all the affairs of the telecommunication sector then in 1996,

through the PTCL ordinance, telecommunication sector was further split into four departments which are the Pakistan telecommunication limited (PTCL), Pakistan telecommunication authority (PTA), National telecommunication corporation (NTC) and Frequency allocation board (FAB).

Pakistan telecommunication authority (PTA) is a regulatory body responsible for governing all the affairs of private telecom companies including mobile phone companies, internet service providers, paging and pay card companies. It is also responsible for issuing licenses to new companies. The national telecom corporation NTC is responsible for providing the telecom services to all the Government. Organizations and Pakistan armed forces. Pakistan telecommunication the only in fixed line service provider along with the wireless services though WIFI technology as well as easy plug in devices (EVO). In this regard, perhaps the most important segment of the Pakistan telecom industry is mobile phone service. In 1990, wireless telecommunication service was introduced by two mobile service providers, Instaphone (Pakcom Limited) and Paktel (cable & Wireless Corporation). Consequently, Mobilink GSM (Motorola Corporation) was the first to launch the GSM technology in 1994 and six years later, Ufone GSM (A subsidiary of PTCL) was launched. Meanwhile, Telenor and Warid telecom initiated their services in 2003. Instaphone has purchased Paktel and converted it into the GSM technology which was purchased by Zong. Through this acquisition, the 5th mobile service provider with the name of Zong has started its operation in 2006.

Consequently, the largest players of the industry are Mobilink + Warid (in 2015, Mobilink has acquired Warid and now both are operating jointly under a single network as one brand namely Jazz), Ufone (Pak Telecom Mobile limited), Zong

(China mobile Pakistan) and Telenor Pakistan. There is intense nature of rivalry in Pakistan telecom sectors due to this market share and other statistics seem to fluctuate very rapidly. Jazz is the market leader with 29 % market share followed by Telenor 29 %, Zong 19%, Ufone 15% and Warid 8%. After the merger, Jazz is leading the market share with 37% by the end of June 2016 (PTA, 2016). Meanwhile, Tele-Dency has reached 70.9% with the penetration rate of 69.1%. It was also reported that 86 percent of the population in Pakistan are telecom users. This indicates that the telecom sector is highly prioritized by the population.

Past works reported that Pakistan is one of the most promising south Asian markets with more than 134 million telecom subscribers (PTA, 2016). In 2007, Pakistan pioneered the Mobile network portability program (MNP) facility in South Asia. The MNP facility has considerably encourage the churning (switching) of telecom subscribers. Pakistan telecommunication Authority (PTA) controls all the affairs of telecom sector ranging from Operations, Maintenance and Provision of mobile phone services throughout the country. In the meantime, the Pakistani telecom sector is very responsive towards technological changes as this sector has upgraded his technology from 3rd Generation (3G) to 4th generation long term evolution (4G LTE) at very rapid pace (GSMA, 2015). The growth of broadband subscriptions has a positive impact on the telecom industry. By considering the current growth i.e. 1.85% reported in July 2015, projected to be reach up to 140 Million subscribers by 2016.

Similar to other telecom operators, Pakistani telecom operators are facing two-sided competition. First, from the competing mobile operators and secondly from the other service providers who capitalize on “internet protocol “IP and providing various texts

and voice services like Face book, Twitter, Skype, WhatsApp , IMO , Viber . Pakistan's Facebook users, for example, were reported at 27.0 million in 2017 (Tariq, Sajjad, Usman, & Amjad, 2017). Furthermore, Nasir (2013) argued that in 2013, there were 10 million Face book users out of those 8 million were males and 3 million females; and approximately 6 million of users fall between the age group of 18-24 .In addition to that, the highest percentage of mobile users in Pakistan (77%) fall between the age group 21-30 (Grappetite, 2017). As the majority of smart phone and social media users come from generation Y, they are exposed to a lot of alternatives for sending messages or calls through personal computers, laptops, iPods or even some smart phone offers free services, users in this age group could be lured away easily causing real threats to all the inobile operators in Pakistan.

The pattern of revenue growth is also declining in the telecom sector. In this light, even though telecom revenues and contributions to national exchequer presenting increasing trend as compared to FY 2014-15, but they are far below from FY 2013-14 (table 2.1). ARPU (Table 2.2) and Per MB Revenue have also. The per MB revenue has declined up to 64% in the last two years (Atta, 2016). In 2016, it was recorded at 0.20\$ while it was 0.25\$ in 2015 and 0.55 \$ in 2014. This statistic shows a substantial decline in the per MB Data revenue. Moreover, Average Revenue per User is just Rs 200 per month which is the lowest in 233 nations of the world. The Average user per month in Asian market is shown in table 2.3. These indicators reflect the core challenges faced by the Pakistani telecom operators.

Table 2.1

Telecom Reveneue (Pakistan Ruppees RS (mil)) Durring last 5 years (2013-2017)

<i>Year</i>	<i>2013-2014</i>	<i>2014-2015</i>	<i>2015-2016</i>	<i>2017(Q2)</i>
Revenue	463.5	445.1	454.8	234.9

Table 2.2

Cellular voice tariff (price) Per Minute (in Rs)

Year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Revenue	1.68	1.38	0.93	0.77	0.63	0.60

Table 2.3

ARPU (\$) (where Telenor operates)

Country	Malaysia	Thailand	Bangladesh	Pakistan
Revenue (\$)	0.069	0.019	0.007	0.005

In a nutshell, review of the literature reveal the hypercompetitive nature of competition on the global and Pakistani telecom operators due to the dominance of certain players and intense nature of rivalry among operators. The literature also shed the light on the nature of rivalry prevailed in Pakistani telecom sector. Furthermore, it has also highlighted the growing switching trends and declining satisfaction and loyalty status among the telecom subscribers. Therefore, considerable efforts are required from the academicians and more particularly from the practitioners to probe the situation prevailing in the telecom sector to streamline the competition through the assertion of customer loyalty.

2.3 Customer Loyalty

One of the most prominent ramifications of capitalism is competition (Meyer & Kirby, 2012; Wells & Graafland, 2012) In a competitive industry, customer acquisition becomes very difficult (Anderson & Simester, 2013; Kumar & Srivastava, 2013). In such state of affairs, focusing on existing customers will enhance the likelihood of revenue growth (Ball et al., 2004; Edward & Sahadev, 2011; Lin, 2010; Oly Ndubisi, 2007b) and viable competitive advantage (Keaveney, 1995; Kumar & Srivastava, 2013) because it is less expensive to retain the existing pool of customers

then to attract the new ones (Edward & Sahadev, 2011; Gronroos, 1990; Oghojafor, Mesike, Omoera, & Bakare, 2012; Reichheld & Sasser, 1990b). In these situations, loyalty will serve as an effective assurance against the competitive uncertainties.

Customer loyalty has gained much attention and has been extensively studied because of its close link to profitability, organizational survival and growth (Chadha & Kapoor, 2009; Wang, 2010). The attainment of customer loyalty is the prime concern in the telecom sector due to the sudden shift in the focus of customer acquisition to customer loyalty. Consequently, it is posited that acquiring new customer would cost ten to twenty percent more than to retain the existing pool of customers. Brown and Leigh (1996) stated that the acquisition of new customer would cost more than holding of the existing once. This phenomenon is more relevant to the telecommunication sector for being the fastest growing service sector and having both “high customer turnover and high customer acquisition cost” (Bolton, 1998; Jaaron, 2014).

Loyalty has gained much attraction as the most effective strategic tool among marketing researchers and practitioners. However, there has been a great fix in defining loyalty because of its universal importance as every scholar has defined loyalty from his own contexts. Nevertheless, one of the most comprehensive definitions of loyalty was given by Oliver (1999) as the “ Deeply held commitment to repurchase and patronize preferred product or service consistently in future, causing repetitive purchases”. Customer loyalty has received considerable attention among past and contemporary researchers because of the fact that just customer acquisition alone will not ensure the long term survival of the firm unless it is backed up by the customer loyalty (Muriuki, 2015).

Reichheld and Sasser (1990a) suggested that one of the most prominent benefits of customer loyalty lies in its ability to spread positive word of mouth. Reichheld (1993) Mentioned that customer loyalty can increase the profitability of the service organization by up to 50% as well as capable of reducing the customer migration/switching up to 5%. Moreover, previous studies which were done by Allaway, Gooner, Berkowitz, and Davis (2006) & Yi and Jeon (2003) identified few competitive advantages that loyal customer offers to the firm such as they reduce the market share of the competitors because of their repetition of purchasing tendencies. In fact, loyal customers are not as price conscious and cannot distract from the competitors pricing strategies. They are more humble and allow the firm to correct their failures before making decision to switch.

Moreover, retaining loyal customers is the more cost efficient than acquiring new customers. Marketing practitioners and academicians have stressed on anticipating the customers' changing needs and wants better than their competitors (Grönroos & Helle, 2012; Kotler, 2017). Consequently, contemporary studies are considering the customer loyalty as the most strategic concern for the firm. Therefore, strategic shift has been observed from customer acquisition to retention based on the fact that acquiring new customers is more expensive than retaining the existing pool of customer through the attainment of customer loyalty.

2.3.1 Conceptualization of Customer Loyalty

There is a great mix between marketing practitioners and academicians with respect to loyalty conceptualization (Yaqub, 2017). Past studies have examined the multidimensional nature of loyalty from the two broad perspectives, one angle stressed on the building process (Kiyani et al., 2012) while other focused on the

related outcomes of loyalty (Chumpitaz Caceres & Paparoidamis, 2007; Zeithaml, Berry, & Parasuraman, 1996). Besides this, as argued by Yaqub (2017), no consensus exists on the most appropriate definition of loyalty while Oliver (1999) defined loyalty “as a deeply held commitment to re-buy or Repertories a preferred product/ service consistently in the future”.

Moore, Ratneshwar, and Moore (2012) argued that the focus on customer loyalty can rightly address the most challenging phenomenon like “why customer stay and leave the service provider?” in order to understand the underlying reason behind the customer defections, firms must track the underlying issues behind the customer churning behaviors. The cited author further argued that attainment of customer loyalty through relational building tools like relational bonds can restrict the customer switching phenomenon. However, despite the notable relation building efforts through the loyalty programs customer still switched the service providers. Sometimes loyalty programs cannot work because various customer segments may exhibit different loyalty behaviors (Moreira, Silva, & Moutinho, 2016; Ulubaşoğlu et al., 2017). An even deeper issue is why customers become loyal to the service firm. To answer this question, Oliver (1997) argued that customer loyalty is divided into two forms, attitudinal loyalty and behavioral loyalty where attitudinal loyalty builds through the three sequential stages (e.g., cognitive, affective and Conative) where in every stage, customers will experience the increase in loyalty.

In the cognitive loyalty stage, a customer starts acquiring information about the brand attributes while in the affective stage; the customer will develop a positive attitude towards the brand. Consequently, in the conative stage, the customer forms a commitment to re-buy the brand and in the final stage of loyalty, the customer will

move from (cognitive, affective and Conative stages) into the last stage of action loyalty, which is the ultimate goal of a firm (Oliver, 1999). The customer cannot move to the action stage until he moves through all these stages simultaneously (Evanschitzky & Wunderlich, 2006; Han & Hyun, 2012). Meanwhile, there might be some customers who like the product (affective loyalty) even without having any prior purchasing experience. In this light, Beerli, Martin, and Quintana (2004) illustrated attitudinal loyalty as a loyalty emerged from inertia and further preferred the true brand loyalty in terms of behavioral loyalty.

Inertia refers to the tendency of the customer by which he assumed the current brand as superior than other and assumed his selection as better as compared to the substitute brands (Beerli et al., 2004). On the other hand, a competitor can easily alter the attitude of customers with emerging inertia because of the little resistance to switching. (Zhang & Prybutok, 2005) conceptualized the loyalty in B2B market standpoint and defined it as “the customer’s commitment to a company, or the company’s desire to keep an enduring relationship with the vendor” while Yim, Tse, and Chan (2008) has conceptualized the loyalty parallel based on Oliver (1999) and defined loyalty as “a highly deep commitment to keep on purchasing a product or service in the future regardless of the fact that there are situational factors and marketing efforts which have potential to create switching behavior”.

2.3.2 Measurement of Customer Loyalty

Review of past studies has demonstrated the three methods of loyalty measurements. These are attitudinal loyalty, behavioral loyalty and composite loyalty (Bowden, 2011; Oliver, 1997; Zeithaml et al., 1996). Consequently, constant, re buying behavior reflects the behavioral loyalty measurements. However, the main drawback

of this scale is that customer repurchasing behavior, which is the foundation of this scale does not always represent its psychological commitment with the brand (Morgan & Hunt, 1994). For example, continuous purchasing or service subscription behavior of subscriber does not show its commitment, trust or satisfaction on the operator, it may be because of the convenience or any other factor. Whereas, attitudinal loyalty refers to the customer favorable attitude towards the service providers and willingness to recommends to others. Sometimes customers will recommend a brand to other even without patronizing it first which could be due to the expensive nature of the brand.

The third approach is composite loyalty which is the combination of both attitudinal and behavioral dimensions to measure customer loyalty through customer repeated purchasing, the tendency of brand switching, willingness to recommends other through positive word of mouth (Day, 1969; Lutz & Winn, 1974). The combined use of attitudinal and behavioral loyalty will enhance the predictive power of loyalty construct and such measures have been enormously practiced in the past studies (Cudjoe et al., 2015; Danish, Ahmad, Ateeq, Ali, & Humayon, 2015; Muturi et al., 2013; Segoro, 2013; Shafei et al., 2016). Moreover, studies which have used the composite loyalty as a measurement tool have focused on four dimensions to extract their measurement scales. These dimensions include trust on service provider for not cheating, the continuation of business with the same service provider, repurchasing behavior and spreading positive word of mouth (Aydin & Özer, 2005; Hassan et al., 2013; Muturi et al., 2013; Segoro, 2013). Some studies have described little variations in their loyalty measurement (Beerli et al., 2004; Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Han & Hyun, 2012; Leverin & Liljander, 2006).

Beerli et al. (2004) Developed three items to measure loyalty (e.g., switching resistance, individual attitude towards loyalty and positive word of mouth (WOM)) while Han and Hyun (2012) used three items to measure the customer loyalty in his studies related to four- stage loyalty model. Furthermore, Leverin and Liljander (2006) adopted four dimensions and four items from the study of Zeithaml et al. (1996) to measure customer loyalty.

2.4 Research Theoretical Background

The theoretical background of this study combines three types of underpinning theories, namely; Oliver Four stage Model, expectation confirmation theory and reciprocity theory. The following section provides detailed descriptions about these theories.

2.4.1 Oliver Four Stage Model

Oliver Four Stage Model (Oliver (1997) has introduced a new theory on customer loyalty. He defined loyalty “as a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts that have the potential to cause switching behavior”. According to Oliver, loyalty is mainly a learning process and therefore, studied the relationship between attitude and behaviors. He recommended that strong loyalty should be developed in three consecutive Stages, namely; Cognitive, affective and Conative. Later on another stage “Action “was added, and therefore, the loyalty model was extended as the four-stage model. The details of each stage are elaborated in the next section:

2.4.1.1 Cognitive loyalty

Cognition refers to people thoughts or attitude about the objects. At this stage, various brand attributes such as perceived prices, quality of brands influence the customer loyalty (Blut, Evanschitzky, Vogel, & Ahlert, 2007b; Oliver, 1999). In this stage, customers start learning about the brand from the internal and external sources (Oliver, 1999; Yang & Peterson, 2004). So, in this stage customer loyalty is not confirmed or having a fragile type of loyalty (Blut et al., 2007b; Oliver, 1999). Moreover, There is a chance of switching if customers observe attractive features or offers from other competitive brands (Siri et al., 2008).

2.4.1.2 Affective loyalty

At this stage, customer may feel some kind of affections or positive attitude derived from the positive experience at the cognitive stage. customer affection of favorable attitudes towards brand is called emotional loyalty which is due to the satisfying experience from the brand in the first stage (Mokhtar et al., 2011). Furthermore, emotional loyalty is much stronger than the cognitive loyalty. So, at this stage customer satisfaction will become an indicator of affective loyalty. In this study, customer satisfaction is used as a predictor of affective loyalty as supported by previous studies (Mokhtar et al., 2011; Oliver, 1999; Tong, Wong, & Lui, 2012). However, affective customer satisfaction is hardly explained in the telecom sector (Aydin & Özer, 2005) and in this study, satisfaction will be used as a predictor of affective loyalty. however, at this stage, customer can also be switched despite of satisfaction (Boohene & Agyapong, 2011; Oliver, 1999).

2.4.1.3 Conative loyalty

Conation refers to the behavioral intentions or willingness to act. According to Oliver (1999) "The Conation Dimension is said to depict the action tendencies one has to approach or avoid an object or perform some response": This type of loyalty is resulted from the positive prior experience of affective stage and customer feel a sort of commitment with the brand and exhibits it through the repeated purchases. Conative loyalty produces attitudinal loyalty, which requires actions to move to the next phase of loyalty (Oliver, 1999; Sivadas & Baker-Prewitt, 2000). Corporate image can be the predictor of attitudinal loyalty and having a significant impact on the behavioral loyalty, as shown by the empirical findings from the various studies where corporate image demonstrated a significant influence formation of behavioral loyalty via attitudinal loyalty (Aboul-Ela, 2015; Cheng, 2011; Rosenberger, 2004; Vinhas Da Silva & Faridah Syed Alwi, 2006; Zins, 2001).

2.4.1.4 Action Loyalty

The last stage is the action loyalty which is based on the previous intentions created in the customer's mind which forced him to take the favorable initiative. According to Oliver (1999), loyal customers will overcome all the obstacles and continue to use the brand in this stage. Thus, this stage is very important for the Relationship development perspectives. If customers are satisfied they will turn into the loyal advocate of the firm at this stage (Oliver, 1999). On the contrary, reviews of past studies revealed contradict views about action loyalty. It is not always possible that behavioral intentions always transform into the actions, therefore the first three stages may urge intention but do not guarantee that it could be transformed into actions. Nevertheless, the review of past studies argued about the limitation of measurement

issues of action loyalty. However, the closest measurements shown in literature are “buying, repeat purchases, preference over competitors and switching avoidance” (Anderson & Srinivasan, 2003; Han et al., 2008; Harris & Goode, 2004; Tong et al., 2012). As such, researchers have adopted the measurement of action loyalty constructs through the behavioral intentions measures and obtained the desirable results (Brady, Voorhees, & Brusco, 2012; Caruana, 2003; Kaur & Soch, 2012; Vanniarajan & Gurunathan, 2009).

2.4.2 Limitation of the Four-Stage Model

There is a lack of consistency found in marketing practitioners and academics researchers on grounds of following the continuum of Oliver’s four-stage model. As shown by several scholars, it is not necessary to follow the continuum suggested by the Oliver on the grounds that one single study cannot measure the entire form of loyalty sequentially due to the complex nature of loyalty and therefore, it is argued that loyalty does not need to be linear (Agustin & Singh, 2005; Aydin & Özer, 2005; Blut, Evanschitzky, Vogel, & Ahlert, 2007a; Evanschitzky & Wunderlich, 2006; Hinson, VanZyl, Nimako, Chinje, & Asiamah, 2016). This phenomenon is rightly addressed by East, Gendall, Hammond, and Lomax (2005) who mentioned “each loyalty stage predicts subsequent loyalty is highly questionable especially when conative is laid to predict action loyalty as no single definition of loyalty can predict loyalty outcomes of recommendation, search and retention”.

Consequently, these inconsistent views are also evident from the empirical findings of the studies conducted in different industries like telecommunication, airlines and have shown significant relationship between cognitive and conative loyalty as well as between conative and action loyalty (Han et al., 2008). A study by Murale and Smrithy (2013) positioned a significant positive relationship between cognitive loyalty and behavioral loyalty. Therefore, it can be assumed that loyalty does not necessarily follow the array of sequence indicating the multidimensional complexity, as coincided by Oliver (1999), cited by (Han et al., 2008; Hinson et al., 2016). Nevertheless, in several studies, customer loyalty is build by following the sequential continuum (Hinson et al., 2016; Kuzgun, 2015; Oliver, 1999). Therefore, these inconsistent views urge researchers to conduct other studies to reduce the ambiguity which prevails among the marketing researchers and practitioners.

The hypothetical links of Oliver four stage model for the current study is highlighted in the following figure 2.1.

Figure 2.1
Oliver, 1999 Four Stage Model

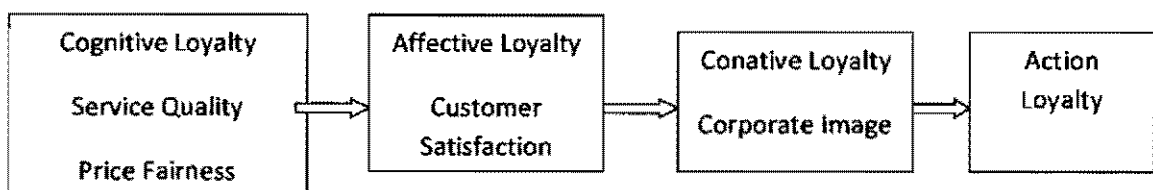


Table 2.4

Summary of Studies on Oliver four stage model as underpinnings

Table 2.4 (continue)

Author	Country	Industry	Respondents	Methods	Findings	
					Supported	Not supported
Hinson et al. (2016)	Ghana	Telecom	227 Prepaid & post paid Subscribers	PLS-SEM	CGL → AFL AFL → CNL CNL → BHL AFL → CNL CNL → BHL CGL → CNL CGL → BHL CGL → AFL AFL → CNL	
Kuzgun (2015)	Turkey	Service Sector	193 Members of Face book brand pages	Linear Regression Analysis	CGL → AF L AFL → CGL CNL → BHL CNL → CNE CNL → EEN BHL → PHE	AFL → EEN
Han and Hyun (2012)	USA	Restaurant	394	SEM	PV → AFL SQ → AFL CI → AFL AFL → CNL CNL → ACL	
Han, Kim, and Kim (2011)	USA	Hotel	459	SEM	PV → PE. SQ → P.E PV → NE. SQ → N.E. P.V → Sat. SQ → Sat. Sat. → Revisit Int. Com → ACL Revisit Int. → ACL	NE → Commit. P.E → R. Int. N.E → R.Int.
Tsai, Tsai, and Chang (2010)	Taiwan	Hyper market	236	Regression	SC → Loy. PF → Loy. SC → Loy	SC → Loy
Han et al. (2008)	China	Service Sectors	3578	SEM	CNL → AFL. AFL → CNL CNL → ACL	
Aydin and Özer (2005)	Turkey	Telecom	1662 Postpaid & prepaid	SEM	SQ → Loy SQ → Trust SQ → CI SQ → SC Trust → SC Trust → Loy SC → Loy	CI → Loy
Caruana (2003)	Australia	Telecom	200	Canonical Correlation	SC → Loy Cont SC → CNL Relat. SC → AFL Relat. SC → CNL	Info. SC → ACL

Table 2.14 summarizes the past studies that have integrated the Oliver 4 stage model as underpinnings. The review of above studies has shown the inconsistencies in the results that is urging the researchers for the further empirical investigation for the better generalizability and understanding of the Oliver 4 stage model.

2.5 Expectation-Confirmation Model (Oliver, 1980)

Review of past literature confirmed that Expectation Confirmation Model (ECM) is the most prominent and widely used in the field of consumer behavior. Several past studies have used this model to examine customer post purchase decisions, customer satisfaction and effectiveness of service marketing (Anderson & Sullivan, 1993; Dabholkar, Shepherd, & Thorpe, 2000; Oliver, 1980) . This model is known to predict the most likely customer behavior over a wide range of continuing purchase of any particular product or service under different setting like repurchasing under E-commerce, online repurchasing intentions (Liao, Lin, Luo, & Chea, 2016; Zamzuri, Mohamed, & Hussein, 2008), intention to continue on line banking (Yu, 2010), insurance policy repurchase decision (Hellier, Geursen, Carr, & Rickard, 2003), revisit intention of a restaurant, airline carrier (Han, Back, & Barrett, 2009; Hsu, Yen, Chang, & Woon, 2016), re-consumption of particular services (Tudoran & Olsen, 2017) and more importantly, to measure the customer loyalty (e.g., Lin, Tsai, & Chiu, 2009; Serenko & Stach, 2009; Yoon & Kim, 2000).

According to Oliver (1980), customers will develop re-purchase intentions in an ECM framework by first, customers will establish initial expectation about the proposed product or service just before actual purchasing and subscribing those services. As a result, they will use and accept that product or service. After experiencing the initial experience, they will develop the after-purchase decision

which is shaped up from the performance experience of that particular product or service. As a result, they will form their perceptions about the product or service based on the extent of performance achieved from the product or service will meet his/her initial expectations. Moreover, customers will form satisfaction or affection with that product or service at this stage based on their level of confirmation and attained a level of expectations. Lastly, based on their satisfied experiences customer will develop re-purchase decision about that particular product or service which in turn form the sense loyalty among customer about that product in the long run. However, a dissatisfied customer will discontinue his re-purchasing decision about that product or services because on their dissatisfied experiences.

According to ECM attainment of customer retention or loyalty through the re-purchase decision is merely based on the customer's own willingness that was shaped from the intensity of confirmation-disconfirmation of the ability of the product or service to meet his expectations (Anderson & Sullivan, 1993; Oliver, 1980). Therefore, customer satisfaction will be more critical in the development of customer loyalty under the ECM framework. Moreover, satisfied customers will more likely to stand with the firm and more likely to remain loyal with the firms because of their prior satisfactory experiences with the firm (Anderson & Sullivan, 1993). Therefore, higher performance of product or service will ensure the likelihood of positive experiences as this will form the customer loyalty through customer satisfaction. On the contrary, "the reverse will cause dissatisfaction; disconfirmation and discontinuation of repurchase intention "(Oliver, 1981).

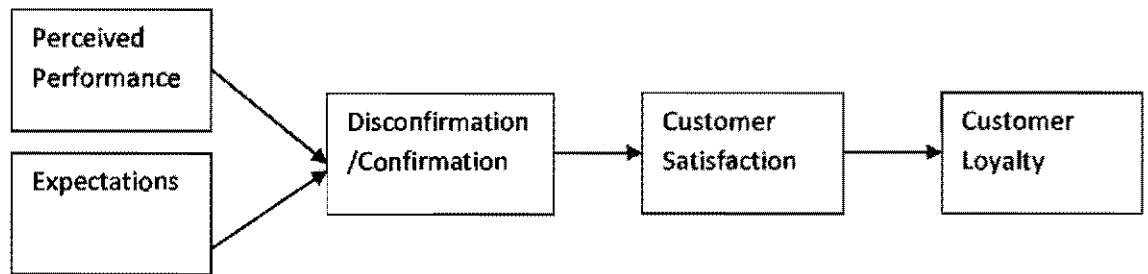


Figure 2.2:
Expectancy-Confirmation/Disconfirmation Model

As shown In figure 2.2 ,Oliver (1980) defined disconfirmation as the perceived gap between performance and expectation , which can be derived from the objective evaluations, psychological states, prior satisfaction and attitude. The basic rationale behind the selection of EDM model is the inclusion of customer satisfaction as the mediating variable between perceived service quality, price fairness, perceived justice with service recovery and relational bonds and customer loyalty. This scenario truly represents the underlying principles of EDM that when customers are satisfied, their loyalty toward a telecom operator will emerge (continue usage of service) . On the contrary, if they are not satisfied with the services provided by the mobile operators, they will become disloyal (discontinuance of services). In a nut shell, EDM is another important underpinning of customer loyalty and widely used in the various studies as shown in the following table 2.5.

Table 2.5
Summary of studies on EDM as underpinnings

Author	Country	Sample	Sector	Constructs	Underpinning Theory
Kim, Park, Yun, and Kwon (2017)	China & Korea	530	Telecom	Network Externalities Network Quality Network intimacy User satisfaction Usage intention	EM
Hong, Lin, and Hsieh (2017)	Taiwan	276	Technology industry	Customer innovativeness Hedonic values Utilitarian values Continuous intentions	ECM
Oghuma, Libaque-Saenz, Wong, and Chang (2016)	South Korea	334	Telecom	Perceived usability, perceived security, perceived service quality, continue usage intention	ECM
Luqman, Razak, Ismail, and Alwi (2016)	Malaysia	632	Mobile Commerce	Satisfaction Confirmation Perceived usefulness Personal innovativeness Perceived usefulness Individual characteristics Self efficacy Personal expertise Continue intentions	ECM
Susanto, Chang, and Ha (2016)	Korea	301	Banking	Perceived security and privacy Confirmation Perceived usefulness Trust User satisfaction Self-efficacy Continuance use intentions	ECM
Lekstutyte (2016)	Portugal	287	Restaurant	Experimental marketing Expectation disconfirmation Customer satisfaction Customer Conative loyalty Customer action loyalty	ECM
Vun, Harun, Lily, and Lasuin (2013)	Malaysia		E-Commerce	E-Service quality Customer satisfaction Customer loyalty	ECM
Valvi and West (2013)	UK	290	Education	Perceived value Price Trust Satisfaction E-Loyalty	ECM

Table 2.5 (continues)

Author	Country	Sample	Sector	Constructs	Underpinning Theory
Serenko and Stach (2009)	USA	95	Tourism & Travelling	Service expectations Service quality Word of mouth Customer loyalty	ECM
Molinari, Abratt, and Dion (2008)	USA	384	B2B	Satisfaction Quality Value Loyalty Positive word of mouth	ECM
(Floh & Treiblmaier, 2006)	Australia	2075	Banking	Web-site quality Service quality Overall satisfaction Trust Customer loyalty	ECM
Lam, Shankar, Erramilli, and Murthy (2004)	USA	268	B2B	Customer value Customer satisfaction Switching costs Customer loyalty	ECM

2.6 Reciprocity Theory

From the extensive review sociology, Anthropology as well as the ethnology studies, reciprocity revealed as a significant influence on human behavior. This phenomenon has been empirically investigated through empirical and experimental works in the fields of Psychology, Behavioral Sciences and Economics (Falk & Fischbacher, 2006). The concept of Reciprocity is not new; rather, it is rested in human nature as people reactions are based on the consequences or experiences. If we have a good experience, we will show the positive responses, but negative experience will lead towards the negative response reciprocally. The Reciprocal relationship can be preciously understood from the quotes of The Edda. "A man out to be a friend to his friend and repay gifts with gifts. People should meet smiles with smiles and lies with treachery". In this regard, there are two Reciprocal behaviors, positive reciprocity which refers to the incentives or rewards against kind behavior whereas, negative reciprocity refers to the punishment against the unkind behavior.

This phenomenon is apparent in business. Firms will satisfy the customers through their Service Quality, Fair Prices, and Prompt Service Recovery as well as offers them the relational incentives in the forms of Relational Bonds then this behavior will result to Customer loyalty. However, if the service provider is unable to satisfy the customer then as a negative response customer will be disloyal and can switch to others service providers as a negative outcome reciprocally. Previous works have also confirmed the reciprocity as the conspicuous element of human behavior (Falk & Fischbacher, 2006; Fehr & Gächter, 2000; Kahneman, Knetsch, & Thaler, 1986). The main focus of this theory is on how people judge or perceive kind or unkind behaviors (Falk & Fischbacher, 2006).

In this current study, the evaluations or judgments bring up customer responses to kind behavior reflected by level of customers' satisfaction with their service providers and this will lead towards reciprocity whether the customer will be loyal because of the kind behavior or he may be disloyal. Consequently, a customer will switch to another service provider if he perceives unkind behavior. In the current study, the reciprocity theory will be implemented in the following ways.

- ❖ Based on Perceived Service Quality customer will stay Loyal.
- ❖ Based on superior Perceived Price Fairness customer will stay Loyal.
- ❖ Based on superior Perceived Fairness in Service Recovery customer will stay Loyal.
- ❖ Based on Customer satisfaction Customer will stay Loyal.
- ❖ Based on customer dissatisfaction due to poor Perceived Service Quality, Price Fairness, Perceived Fairness in Service Recovery or Relational Bonds

customer will be disloyal and can switch to other service provider as an unkind response.

2.7 Factors affecting customer loyalty

Review of past and recent marketing studies have shown that customer loyalty as the most important factor that enhances the firm's performance in the competitive industry (Izogo, 2016). Loyal customers are important assets for the firm; hence, undoubtedly, gaining customer loyalty is one of the most prioritized concerns for firms. By considering the unified importance of customer loyalty, it is imperative to ponder the factors that determine the customer loyalty (Kaur & Soch, 2012). Moreover, Abrar and Nasir (2013) argued that proper examination of antecedents of loyalty will assist in the determination of the most significant predictor of customer retention. Numerous studies have been carried out globally in order to ascertain the determinants of loyalty in diverse sectors.

The antecedents of loyalty in the telecom sector have been immensely investigated. However, the relationships between the various antecedents are often ambiguous in nature (Table 2.6). One probable reason behind this is the ambiguity that the respondents itself acts as the unit of analysis. Although considerable studies have been conducted to investigate the antecedents of loyalty among distinctive groups of customers like prepaid and postpaid (Aydin & Özer, 2005; Lee et al., 2006; Santouridis & Trivellas, 2010), there are still a lack of studies found on investigating the loyalty between emerging customer groups like stayers and switchers (Moreira, Silva, & Moutinho, 2016; Yaqub & Halim, 2017).

In this light, distinguishing customer in distinctive segments is very important due to the significant differences shown by past studies within and between these segments with respect to their perceptions about various antecedents of loyalty in telecom sectors (Moreira, Silva, & Moutinho, 2016; Ulubaşoğlu et al., 2017). Therefore, distinguishing between customers, followed by comparison will provide valuable inputs about these two groups and this will assist policy making and relationship development.

The studies about the various antecedents of customer loyalty in the telecom sector are mainly revolved around the factors like service quality, price fairness and service recovery. Apart from these variables, detailed descriptions about the various antecedents of loyalty are elaborated in table 2.6

Table: 2.6
Summary of studies on customer loyalty in Telecom sectors

Antecedents	Author	Country	Analysis Tool	Underpinning	Results	
					Supported	Not-supported
Trust Satisfaction Switching barriers	Razzaq, Razzaq, Awan, and Ansari (2018)	Pakistan	SEM	Composite	Trust → CL CS → CL SB → CL	
Satisfaction Brand image Perceived value Perceived Quality	Morgan and Govender (2017)	South Africa	SEM	Composite	BI → CS PV → CS CS → CL	PQ → CS BI → CL PQ → CL PV → CL
Complaint handling Satisfaction Perceived value Trust Service quality	Yusoff et al. (2017)	Malaysia	SEM	Exit-voice Theory	Trust → CL CS → CL SQ → CS → CL Tr → CS → CL	SQ → CL PV → CL CS → CL SC → CS → CL PV → CS → CL
Corporate image Service quality Trust Cus. Satisfaction	Hafez and Akther (2017)	Bangladesh	Multiple Regression	Composite	SQ → CL CS → CL Trust → CL CI → CL	SC → CL

Table 2.6 (continues)

Antecedents	Author	Country	Analysis Tool	Underpinning	Results	
					Supported	Not-supported
Cus. satisfaction Brand Image Switching cost	Ram et al. (2016)	China	SEM	Composite	BI→CL CS→SC	BI→SC CS→CL SC→CL BI→SC→CL CS→SC→CL
Service quality Switching barriers Switching costs Alternative attractiveness	Shafei et al. (2016)	Egypt	Regression analysis	Composite	SQ→CS SC→SB Alt.Atrac.→SB SC→CL SB→CL	SB→CS→CL SQ→CL
Service reliability Commitment	Izogo (2016)	Nigeria	Multiple Regression analysis	Attitudinal	SR→CL CC→CL	
Service quality Corporate image Cust. satisfaction	Tabaku and Çerri (2015)	Albania	SEM	Composite	SQ→CS SQ→CL SQ→CI CS→CL CS→CI CI→CL	
Service quality Price Fairness Cust. satisfaction Trust	Nasir, Mushtaq, and Rizwan (2014)	Pakistan	Regression	Composite	SQ→CL CS→CL SQ→Trust CS→Trust Trust→CL *Price fair→CS	
Service quality Customer value Cust. satisfaction Social pressure Corporate image	Muturi et al. (2013)	Kenya	Regression analysis	Composite	CV→CL SQ→CL SP→CL CI→CL CI*→CV→CL CI*→SQ→CL CI*→CS→CL	CS→CL
Service quality Switching barriers Brand image	Achour, Md Said, and Boerhann oeddin (2011)	Malaysia	Regression analysis	Composite	SQ→CL SB→CL	BI→CL
Service quality Corporate image Cust. satisfaction	Boohene and Agyapong (2010)	Ghana	Regression analysis	Composite	SQ→CL CI→CL	CS→CL

2.8 Antecedents of loyalty in a direct relationship

In a nutshell, the reviews of the aforementioned studies reveal that the antecedents of loyalty in telecom and non-telecom sectors have diverse patterns, for example, the direct relationship derived from previous studies, are based on fragmented antecedents such as trust, satisfaction, switching costs, switching barriers, brand image, perceived value, perceived quality, complaint handling, trust, service quality, alternative attractiveness, service reliability, commitment, price fairness, attitudinal loyalty, Social pressure, cognitive loyalty, affective loyalty, Conative loyalty, Communication, customer knowledge, technical quality, functional quality, brand experience, brand identity, product quality, nationality, brand equity, value equity, relationship equity. A majority of these variables are not included in this study because of their less relative importance and the majority of them do not adhere to the criteria in the underpinning theories. As a result, the majority of these studies have produced inconsistent results.

Gangadhar (2017) cited studies of Jain, Aagja, and Bagdare (2017) and Jhandir (2012) that claimed that despite the in-depth empirical research efforts in the areas of customer relationship management, consumer behavior, business strategy, customer engagement and service marketing there is not a single theory exist which will rightly address how loyalty can be built and what are the most significant predictors of customer loyalty. However, some past and contemporary researchers have acknowledged several factors like service quality, perceived value and satisfaction as the predictors of loyalty (El-Adly, 2018) while different contemporary researchers have identified some additional factors like trust, brand equity, commitment, relationship quality and brand experiences (Afridi, Gul, Haider, & Batool, 2018; Chen

& Myagmarsuren, 2011; Izogo, 2017; Karjaluoto, Jayawardhena, Leppäniemi, & Pihlström, 2012; Morgan & Govender, 2017b), However, these studies have provided only a small insight into the establishment of strong loyalty. Therefore, the theoretical domains of customer loyalty are still unclear and further empirical research is required to find the most significant predictors of loyalty.

2.9 Perceived Service Quality

Service quality has become a subject of debates for some decades now, and many researchers are still investigating on this aspect. Service quality refers to the customer's overall perceptions about the services offered by the service provider. Scholars argued that in order to achieve the desirable level, customer's expectations should be matched with the services delivered by the service providers (Parasuraman, Zeithaml, & Berry, 1985). The above definition has been used in this study, therefore, it is vital for the service provider to evaluate the service at every crucial stage of service delivery to improve their marketing strategies (Chen, 2016; Jain & Gupta, 2004; Tu, Li, & Chih, 2011).

Many past works posited that service quality helps firms to compete successfully with their competitors (Dominic, Goh, Wong, & Chen, 2010; Han, Cao, Fu, & Luo, 2017; Johnson & Sirikit, 2002; Safari, Salehzadeh, Dehbashi, & Yazdi, 2017). This phenomenon is also evident in the competitive market like telecommunication (Al-Zoubi, 2013). As the customers are becoming harder to please due to their increasing exposures and abundance of alternative, the quest for the superior service quality is becoming more apparent. Therefore, accomplishments of superior service quality is gaining top priority in service marketing because it will bring about number of anticipated customer's actions such as positive word of mouth, decrease in customer

complaints , improved customer satisfaction and loyalty, along with increasing firms performance (Karatepe, 2011; Lee, 2015; Mohtasham, Sarollahi, & Hamirazavi, 2017; Rostamy, 2009).

2.9.1 Conceptualizations of Service Quality

Reviews of previous studies on service quality have shown extensive use of the SERVQUAL scale for the measurement of service quality. It has been successfully operationalized and implemented in numerous studies on customer loyalty (Ahmed, Nawaz, Usman, Shaukat, & Ahmed, 2010; Akhtar, Latif, & Ashraf, 2016; Koseoglu, September 2016; Labib, El-Salam, & Shaheen, 2016; Nwokorie, 2016; Santouridis & Trivellas, 2010; Wu, Liao, Chen, & Hsu, 2011). Parasuraman et al. (1985) developed the SURVQUAL Instrument on the basis of Gap Analysis. Consequently, SURVQUAL has become most widely used instrument for service quality on the basis of Ten Dimensions (e.g., Access, Competence, Courtesy, Communication, Reliability, Responsiveness, Credibility, Security, Tangibles Understanding and Knowing Customers). Parasuraman, Zeithaml, and Berry (1988) refined the instrument and reduced it to five by maintaining three base instruments i-e, Tangibles, Reliability and Responsiveness and remaining seven instruments were reformed as Empathy and Assurance. Despite the wide operationalization of SERVQUAL (Caruana, 2002; Mokhtar et al., 2011), this scale had been highly criticized on grounds of failure to define the threshold levels of good service quality, improper measurements of customer expectations, poor assumption for scale operationalization and unjustified gap scores (Asubonteng, McCleary, & Swan, 1996; Buttle, 1996; Carman, 1990; Coulthard, 2004; Cronin Jr & Taylor, 1992). Recently, Gupta (2016) has criticized the SERVQUAL on the operationalization grounds. He further

criticized the generalizability of the scales where it is claimed that this scale will not be useful in other cultures due to cultural differences.

SERVPERF is another scale of service quality focused on the performance based approach as well as it will eliminate customers' expectation issues (Blery et al. (2009); Cronin Jr & Taylor, 1994). Few studies have used the same scale in the telecom sector by adding the additional items like network quality, value added services, mobile devices, pricing structure, billing systems, security, convenience, operating hours, users friendliness, waiting cost (Gautam, 2015; Hassan, Malik, & Faiz, 2012; Kushwah & Bhargav, 2014; Lai, Hutchinson, Li, & Bai, 2007; van Dun, Bloemer, & Henseler, 2011). On the other hand, PAKSERV instrument was introduced by Raajpoot (2004) as an extended version of SURVQUAL. It comprises of three additional dimensions i.e. Sincerity, Formality and Personalization and is based on six dimensions with 24 items. Particularly, this scale was developed with a view to address criticism of SURVQUAL scale on its lack of ability to measure service quality in different cultures.

Raajpoot (2004) indicated that firms must consider the cultural dimensions while measuring the service quality. He also stressed that dimensions of service quality can have different interpretations due to cultural difference and there is a need to consider these differences while measuring the effect of these dimensions. For example, He indicated that in Pakistani Culture, Reliability refers to the delivery of service within the appropriate time frame. However, there are chances of service failure but still, firms must consider the time frame while service delivery. This interpretation is different from other marketing works like Wilson, Zeithaml, Bitner, and Gremler (2012) stressed on the accuracy in the delivery of services.

2.9.2 Studies based on Perceived Service Quality and Customer Loyalty

Service quality and customer loyalty is positively correlated with each other. This relationship has been investigated widely in the diverse industries. Abdelfattah, Rahman, and Osman (2015) studied the impact of service quality on customer loyalty in Health Insurance, Ha, Minh, Anh, and Matsui (2015) investigated the impact of service quality on loyalty in Retail, Ažman and Gomišček (2015) in Automotive, Chou, Lu, and Chang (2014) Rail Service, Liat, Mansori, and Huei (2014) in Hotel Industry, (Chou et al., 2014) railway sector, Prentice (2013) Casinos, Kuo, Chang, Cheng, and Lai (2013) Travel Agencies. Despite of mentioned industries this relationship has been studied diversely in all the sectors and this fact confirmed the significant relationship between these two constructs.

Likewise other sectors, this relationship are widely investigated in the telecom sectors around the world. Several studies demonstrate that preserved service quality as one of the most important antecedent of customer loyalty in the telecom sector. Recently, Theresia and Sadalia (2018) conducted a study in Indonesian telecom sector to investigate the association between service quality and customer loyalty. The findings of this study reveal that service quality has significant positive association with customer loyalty. However, the relationship between perceived service quality and customer loyalty established insignificant relationship in another study conducted by Fernandes (2018) in the Indonesian telecom sector.

Hafez and Akther (2017) examine the association between perceived service quality and customer loyalty. The findings reveal that perceived service quality has significant positive association with customer loyalty in Bangladeshi telecom sector.

In addition, Dubey and Srivastava (2016) study also verified the significant positive association between perceived service quality and customer loyalty in Indian telecom sector. In another study, Yusoff et al. (2017) Assessed 221 university students in Malaysia availing prepaid services. The results of this study have shown insignificant relationship between perceived service quality and customer loyalty. Likewise, the similar insignificant relationship between perceived service quality and customer loyalty was verified in Nigerian telecom sector by Izogo (2016). On contrary, Nasir et al. (2014) study has confirmed the significant positive relationship between perceived service quality and customer loyalty in Pakistan telecom sector. In a similar vein, Al-Zoubi (2013) studied the impact of service quality on customer loyalty in Jordanian telecom sector and found significant positive relationship between service quality and customer loyalty.

Hassan et al. (2013) found significant impact of service quality on customer loyalty of mobile subscribers of selective universities of Multan, Pakistan. Furthermore, Nimako (2012) researched in Ghanaian telecom sector and study revealed significant positive relationship between service quality and customer loyalty. Oyeniyi and Abiodun (2011) Investigated the impact of service quality on customer loyalty in Nigerian telecom Sector. Results of the study showed significant positive relationship between service quality and customer loyalty. Similarly, Liu, Guo, and Lee (2011) found significant effect of service quality on customer loyalty in Taiwan telecom industry. Mokhtar et al. (2011) established the significant positive relationship between perceived service quality and customer loyalty in Malaysian telecom sector. While, Santouridis and Trivellas (2010) conducted a study in telecom sector of Greece in which perceived service quality confirmed in-significant relationship with customer

loyalty. On contrary, Ojo (2010) found a significant impact of service quality in loyalty in Nigerian telecom sector. Aydın and Özer (2005) Study has also revealed significant impact of service quality on customer loyalty in the Turkish telecom sector.

Numerous marketing researchers such as (Al-Zoubi, 2013; Aydın & Özer, 2005; Hafez & Akther, 2017; Hassan et al., 2013; Lee, 2015; Liu et al., 2011; Nimako, 2012; Oyeniya & Abiodun, 2011; Theresia & Sadalia, 2018) found the significant positive association between perceived service quality and customer loyalty but other studies (Ahmed, Nawaz, Usman, Shaukat, Ahmad, et al., 2010; Alam et al., 2016; Hassan et al., 2012; Izogo, 2016; Izogo & Izogo, 2017; Kushwah & Bhargav, 2014; Mokhtar et al., 2011; Morgan & Govender, 2017a; Santouridis & Trivellas, 2010; Yuktanandana & Prasertsakul, 2015; Yusoff et al., 2017) have found in-significant relationship between perceived service quality and customer loyalty in telecom sector.

Therefore, it can be seen from the findings of the previous studies that the relationship between perceived service quality and customer loyalty is inconsistent; many marketing researchers indicate the relationship between perceived service quality is significant, and others have confirmed the insignificant relationship. Moreover, previous studies have some mythological and geographical gaps (Ažman & Gomišček, 2015; Dubey & Srivastava, 2016; Gautam, 2015; Ha et al., 2015; Hafez & Akther, 2017; Hassan et al., 2012; Ismail & Yunan, 2016; Izogo, 2016; Izogo & Izogo, 2017; Liat et al., 2014; Martinelli & Balboni, 2012; Mokhtar et al., 2011; Morgan & Govender, 2017a; Ojo, 2010; Prentice, 2013; Santouridis & Trivellas, 2010; Tu et al., 2011; Yuktanandana & Prasertsakul, 2015; Yusoff et al., 2017). So, their results cannot be generalized to the broader community. Following table is based

on the summary about the past and contemporary studies on the relationship between perceived service quality and customer loyalty in the telecom and non-telecom sectors

Table: 2.7

Summary of studies on perceived service quality and loyalty in telecom and Telecom sectors

Author	Country	Industry	Analysis method	Findings
Theresia and Sadalia (2018)	Indonesia	Telecom	SEM	Significant
Fernandes (2018)	Indonesia	Telecom	SEM	In-Significant
Yusoff et al. (2017)	Malaysia	Telecom	SEM	In-Significant
Hafez and Akther (2017)	Bangladesh	Telecom	Regression Analysis	Significant
Izogo and Izogo (2017)	Nigeria	Telecom	Regression Analysis	In-Significant
Morgan and Govender (2017a)	South Africa	Telecom	SEM	In-Significant
Izogo (2016)	Nigeria	Telecom	Regression Analysis	In-Significant
Yuktanandana and Prasertsakul (2015)	Bangladesh	Telecom	Regression Analysis	In-Significant
Lee (2015)	South Korea	Telecom	SEM	Significant
Al-Zoubi (2013)	Jordan	Telecom	SEM	Significant
Hassan et al. (2013)	Pakistan	Telecom	Regression Analysis	Significant
Nimako (2012)	Nigeria	Telecom	SEM	Significant
(Hassan et al., 2012)	Pakistan	Telecom	Multiple Regression	In-Significant
Oyeniyi and Abiodun (2011)	Nigeria	Telecom	Multiple Regression	Significant
Liu et al. (2011)	Taiwan	Telecom	SEM	Significant
Mokhtar et al. (2011)	Malaysia	Telecom	Regression analysis	In-Significant
Santouridis and Trivellas (2010)	Greece	Telecom	Regression analysis	In-Significant
Ahmed, Nawaz, Usman, Shaukat, and Ahmed (2010)	Pakistan	Telecom	Multiple Regression	In-Significant
Aydin and Özer (2005)	Turkey	Telecom	SEM	Significant

2.9.3 Service Quality and Customer Satisfaction

Review of previous studies suggests that service quality is one of the most important predictor of customer satisfaction. Parasuraman et al. (1993) Mentioned that perceived service quality and customer satisfaction are interconnected to each other because superior perceived quality will enhance customer satisfaction. Moreover, better service quality will bring a positive impact on customer satisfaction and highly dependent on service quality (Lee, Lee, & Yoo, 2000; Saunders, 2011). Furthermore, Saunders (2011) posited that perceived service quality and customer satisfaction are interdependent on each other. He further argued that perceived service quality is based on abstract judgments while customer satisfaction is based on the customers' evaluations with respect to the feelings or judgments after service encounters or service interactions while service will affect from the values or the experiences. Service quality significantly impact customer satisfaction and long-term survival of the firm.

Due to the interrelationship between both it will not only boast the organizational productivity in terms of profit but also improve goodwill through positive word of mouth (Akroush, 2008; Parasuraman et al., 1993). In this regard, Rind et al. (2016) study found a significant impact of service quality on customer satisfaction in the Pakistan telecom sector. In the similar vein, Plianeendra, Jyothsna, and Mahalakshmi (2016) developed a study in the Indian telecom sector and the results of study confirmed that among five dimensions only empathy and responsiveness were found in a significant relationship with customer satisfaction.

In another study, Saha, Islam, and Hoque (2016) found significant impact of service quality dimensions i.e. (price, network quality, value added services and billing system) on customer satisfaction. Similarly, perceived service quality found significant influence of customer satisfaction in the telecom industries of other countries like, Malaysia (Arokiasamy & Abdullah, 2013; Loke, Taiwo, Salim, & Downe, 2011), Pakistan (Ahmed, Nawaz, Usman, Shaukat, Ahmad, et al., 2010; Malik, Ghafoor, & Hafiz, 2012), India (Prabhakar & Ram, 2013), Nigeria (Olatokun & Ojo, 2016), Ethiopia (Negi & Ketema, 2013), Jordan (Haddad, Al-Dmour, & Al-Zu'bi, 2012), Greece (Vranakis, Chatzoglou, & Mpaloukas, 2012). In a nutshell, the extensive review of stated studies significantly affirmed the positive association between perceived service quality and customer satisfaction in the telecom sector.

2.10 Perceived Price Fairness

The review of past literature reflected a greater emphasis on the price fairness. Numerous researchers have focused on the relationship between price fairness perception, customer satisfaction & customer loyalty (Estalami, Maxwell, Martín-Consuegra, Molina, & Esteban, 2007; Hashim, 2014; Hassan et al., 2013; Herrmann, Xia, Monroe, & Huber, 2007; Kukar-Kinney, Xia, & Monroe, 2007; Nazari et al., 2014). Moreover, price is one the main factor which directly impact on the success or failure of the service and the firm's profit (Khan, 2012b). According to Kotler Kotler and Armstrong (2010), price refers to the amount charged against the purchasing of any product or service. It can also define as the sum of the values that customer exchanges against the purchasing of any product or service. In the telecom sector, subscribers always consider the most important pricing related factors before selecting

any operator which are the initial price (including the price of SIM card) and the usage or retaining price i.e. tariff (Hashim, 2014).

Xia, Monroe, and Cox (2004) defined price fairness as “a judgment of whether an outcome and/or the process to reach an outcome is reasonable, acceptable, or justified”. Therefore, it is assumed that perceived price fairness refers to perceived differences in the prices as compared to the prices charged by the competitor in the same industry. In this regard, perceived price fairness is more evident when the perceived differences among the prices are sound, adequate or justifiable. Likewise, consumers will recognize price unfairness when a brand’s product is higher priced compared to similar product from another brand (Ting, 2013). Therefore, marketers should understand and take necessary measures to manage the perception. They must be sure about what the fairness is? Most importantly, The concept of price fairness is unrelated with demand or supply issues (Nazari et al., 2014).

Price perceptions have long being studied in different social sciences fields such as marketing and economics. In general it is agreed that consumers perception of price can be evaluated in two ways, specifically whether it increases or decreases customer satisfaction, and in turn significant behaviors (Leinsle, Totzek, & Schumann, 2018). For example, Konuk (2018) examined the impact of price perceptions on the customer satisfaction and their purchasing behavior and confirmed that price fairness perception positively affects customers’ willingness to pay more if they have had a satisfactory experience. Meanwhile, Nazari et al. (2014) conducted a study in Iranian telecom sector and found a significant, positive link between price fairness, price satisfaction and customer loyalty. In another study, price fairness perceptions positively linked with the word of mouth WOM and repurchase intentions (Nazwirman, 2015). While,

Masih and Helmi (2017) found that price fairness has significant impact of on brand switching behaviors. In a nutshell, it can be assumed that price fairness perceptions have a significant impact on consumer buying behaviors.

2.10.1 Conceptualization of Price Fairness

Srikanjanarak, Omar, and Ramayah (2009) cited Bei and Chiao (2006); Bolton, Lemon, and Verhoef (2004); Völckner and Hofmann (2007) who posited that the conceptualization of the price fairness perception in mass service context has not yet been conducted, and therefore, past studies have mostly conceptualized and operationalized it according to their own contexts. Consequently, Diller (2008) has revealed the need of conceptualization regarding price fairness perception as well as its incapability to capture the complex nature of specific context. Traditionally, price fairness was mainly defined in terms of “reasonable prices “ which could be measured through a single item (Srikanjanarak et al., 2009).

On the other hand, Ranaweera and Neely (2003) have highlighted the need to develop more items to measure of price fairness, as there limited successful attempt to discover the operationalized price fairness perception in previous research which has forced researchers to formulate their own measurement. Additionally, an empirical study by Xia et al. (2004) formulated the price fairness description based on distributive justice and equity theory. Most importantly, Chung and Petrick (2015) later argued that no consensus is found on the dimensionality of price fairness constructs therefore some researchers have measured price fairness as unidimensional construct (Al-Msallam, 2015; Bechwati, Sisodia, & Sheth, 2009; Campbell, 2007; Hassan et al., 2013; Rothenberger, 2015a) while others have operationalized it as a multidimensional concept (Diller, 2008; Xia et al., 2004).

Interestingly, price fairness have been conceptualized in various domains such as Price Perception (Banyte, Rutelione, Gadeikiene, & Belkeviciute, 2016; Bei & Chiao, 2006; Han & Ryu, 2009; Munnukka, 2006), Fairness Price Perception (Daskalopoulou & Petrou, 2006; Diller, 2008; Hassan et al., 2013; Herrmann et al., 2007; L. Ferguson & Scholder Ellen, 2013; Malc, Mumel, & Pisnik, 2016; Martin et al., 2009; Richards, Liaukonyte, & Streletskaya, 2016; Rothenberger, 2015a; YAĞCI, 2010), Price Equity (Bolton & Lemon, 1999; Verhoef, Franses, & Hoekstra, 2001), Tariff (Abdul-Aziz, Saeed, & Alexander, 2014; Bansal & Bansal, 2013; Bhukya & Singh, 2013; Dongre, 2016; Iqbal, Zia, Bashir, Shahzad, & Aslam, 2008). In a nutshell, there is still in-consistent findings on the conceptualizations and measurements of price fairness that can be clearly observed from the above mentioned fragmentations.

According to Sheikhzadeh, Atrianfar, Valiloo, and Fahimi (2012), there are seven theories that can be used for price fairness, which are the dimensions of price fairness; distributive fairness, procedural fairness, interactional fairness, equity theory, attribution theory, prospect theory and dual entitlement principle. These theories have created the eight dimensions of price fairness as illustrated in Figure 2.3.



Figure 2.3
Dimensions of price fairness extracted from the related theories

Sources: (Nazari et al., 2014; Sheikhzadeh et al., 2012)

Previous studies have specified that the perceived price fairness is, in fact a significant psychological factor which plays a key role in determining customers' decision to buy a specific product or availing the services (Bolton, Warlop, & Alba, 2003; Bolton et al., 2004; Xia et al., 2004). For instance, Diller (2008) has observed the significance of price fairness perception while assessing the composite nature of the price. However, earlier research has not covered the price fairness perception regarding the price structure, price plan service option, and price competition amongst service providers.

2.10.2 Studies on Perceived Price Fairness and Customer Loyalty

Several studies have empirically shown that price fairness as a significant predictor of customer loyalty in telecom and non telecom sector. Recently, Yusuf (2018) conducted a study in the Nigerian telecom sector to investigate the link between price fairness and customer loyalty. The results of the study have established the insignificant impact of price fairness on customer loyalty. In the meantime, another study conducted on the Bangladeshi telecom sector has found that price fairness has significant, positive link to customer loyalty (Hossain, Chowdhury, & Jahan, 2017).

Likewise, Marina et al. (2016) conducted a study in Indonesia to analyze the structural relationship price fairness and customer loyalty. The finding revealed that price fairness has a significant positive impact on customer loyalty. Moreover, in order to confirm the relationship between price fairness and customer loyalty in the Turkish hotel industry Gumussoy and Koseoglu (2016) study revealed a significant relationship between price fairness and loyalty.

Hashim (2014) study focused on the Nigerian telecom sector and investigated the impact of perceived price fairness, corporate image and perceived services quality on customer satisfaction and loyalty. The results of the study established that perceived price fairness does not affect customer loyalty. In the similar vein, Nazari et al. (2014) conducted a study to measure the impact of price fairness perception on price satisfaction, customer satisfaction and customer loyalty in the Iranian telecom sector and confirmed a significant impact of price fairness perception on price satisfaction and customer satisfaction, however, it was found that price fairness has no significant impact on customer loyalty. Another study on price fairness revealed significant predictor of customer retention in the Ghanaian telecom sector (Adjei & Denanyoh, 2014). Hassan et al. (2013) indicated in his study that price fairness significantly affect the loyalty status of university students (prepaid mobile subscriber) in Pakistan. Moreover, Onlaor and Rotchanakitumnuai (2010) confirmed the significant positive relationship between price fairness and customer loyalty in the Thai telecom sector.

Numerous marketing researchers such as (Adjei & Denanyoh, 2014; Asadi et al., 2014; Gumussoy & Koseoglu, 2016; Marina et al., 2016; Martin et al., 2009) found the significant link between price fairness and customer loyalty but few studies (Bassey, 2014; Doong et al., 2008; Hashim, 2014; Hassan et al., 2013; Jin et al., 2016;

Nazari et al., 2014; Virvalaite, Saladiene, & Skindaras, 2009) reported the insignificant relationship between price fairness and customer loyalty. Therefore, from the empirically findings of the literature, it can be finalized that the relationship between price fairness and customer loyalty is inconsistent. This inconsistency in scholarly literature calls for more research to examine this relationship for these aspects in other geographical context to ascertain the generalizability of the results.

Furthermore, Nazari et al. (2014) opined that price fairness perceptions is significant predictor of customer buying tendencies towards telecom operators and has a significant impact on customer satisfaction and loyalty. However , scholarly literature regarding the influence of price fairness on customer satisfaction and loyalty remains sparse in the service context (Bolton et al., 2003; Ranaweera & Neely, 2003; Völckner & Hofmann, 2007), particularly in the telecom sector (Nazari et al., 2014). This study will try to fill this literature gap. Table 2.8 summarizes the findings of previous studies on price fairness and customer loyalty.

Table: 2.8

Summary of studies on price fairness and customer loyalty

Author	Country	Industry	Analysis tool	Findings
Yusuf (2018)	Nigeria	Telecom	SEM	In-significant
Hossain et al. (2017)	Bangladesh	Telecom	Amos	Significant
Marina et al. (2016)	Indonesia	Airline	SEM	Significant
Gumussoy and Koseoglu (2016)	Turkey	Hotel	Regression analysis	Significant
Hashim (2014)	Nigeria	Telecom	Logistic Regression	In-significant
Nazari et al. (2014)	Iran	Telecom	SEM	In-significant
Adjei and Denanyoh (2014)	Ghana	Telecom	Multiple regression	Significant

Table 2.10 (continues)

Author	Country	Industry	Analysis tool	Findings
Asadi et al. (2014)	Iran	Tourism	SEM	Significant
Hassan et al. (2013)	Pakistan	Telecom	regression analysis	Significant
Onlaor and Rotchanakitumnuai (2010)	Thailand	Mobile	Regression Analysis	Significant
Doong et al. (2008)	USA	E-Commerce	SEM	In-significant
Martin et al. (2009)	USA	Retailing	Multiple Regression Analysis	Significant

2.10.3 Perceived Price Fairness and Customer Satisfaction

The ultimate goal of an organization is to attain the customer satisfaction and loyalty. Price fairness has been shown as a significant predictor of customer satisfaction (Bassey, 2014; Malc et al., 2016). Customer demands fairness in every moves of the firm, and if a firm demonstrates fairness based on customer's expectation then the likelihood of customer satisfaction will increase. As stated by Rothenberger (2015b), perception of price transparency and price fairness have strong link to customer satisfaction. Customers judge the price from two extents: economic and psychological. Supply and demand status, costs structures and return on investment fall under economic dimension while psychological dimensions reflects the way customer perceived the price fairness or price premiums in the forms of fixed price, honest pricing or sometimes customer advocacy will helps in perceiving the price fairness (Reavey & Suri, 2015).

Consequently, Hassan et al. (2013) studied the impact of price fairness on customer satisfaction and loyalty among telecom subscribers of the selective universities in Multan, Punjab, Pakistan. Results revealed the significant effect of price fairness on

customer satisfaction and loyalty. However, as compare to service fairness and service quality telecom subscribers were found indifferent on price fairness issues. Meanwhile, Sivasubramaniam and Balaji (2014) revealed that price fairness and service quality have insignificant impact on satisfaction of mobile subscribers in India. In the similar vein, Shahzad Khan (2012) studied the impact of price fairness, customer service, service quality on the customer satisfaction of university students of Pakistan. The study revealed a significant impact of price fairness perception on customer satisfaction. Consequently, fair price demonstrate significant impact on customer satisfaction on the mobile subscribers of Bangladesh (Uddin & Akhter, 2012).

Furthermore, Uddin and Akhter (2012) investigated the impact of price fairness and service quality on the satisfaction of mobile subscribers and, proved a significant direct effect of price fairness perception on customer satisfaction while service quality revealed insignificant impact on customer satisfaction. Mlekwa (2014) examined the impact of price fairness and customer service in the mobile subscribers of Tanzania and found a significant effect of both variables on the customer satisfaction. Similarly, price fairness was found to have a significant influence on customer satisfaction as compared to customer service among mobile subscribers in Rawalpindi, Pakistan (Hanif, Hafeez, & Riaz, 2010). Estalami et al. (2007) also reported the significant impact of price fairness perception on customer satisfaction in the service industry in Spain. Other studies also reported that perceived price fairness has a significant impact on customer satisfaction in non-telecommunication sectors, for example, European train companies (Rothenberger, 2015a), Online Shopping (Sun, 2014),

Retailing (Martin et al., 2009), Auto mobile (Herrmann et al., 2007), Service sector in Spain (Estalami et al., 2007). Hotel (Ali, Amin, & Ryu, 2016; Kaura et al., 2015).

2.11 Perceived justice in Service Recovery

Service recovery refers to the reactions of the service provider towards the service failure (Gronroos, 1988). In this regard, service failures are unavoidable in nature and customer will perceive a sense of unfairness after the prevalence of service failure which will upshot in negative emotions (Chang & Chen, 2013; Kim & Jang, 2014). The effects of these negative emotions can be abridged through justified service recovery processes (Lin, Wang, & Chang, 2011). Meanwhile, Perceived justice in service recovery refers to the equitable and rationale based response to service failures (Ha & Jang, 2010).

The interest in service recovery has grown considerably due to the fact that bad or unjustified service recovery experience will leads to customer switching (Nikbin, Ismail, Marimuthu, & Armesh, 2012; Simpe, Otu, & Agyekum, 2015), which in turn resulted into the lost of Customer life time value (Lai, Liao, & Zhu, 2006; Zeithaml, Lemon, & Rust, 2001). On the other hand, effective and justified service recovery will positively affect the Customer Satisfaction (Ibrahim & Abdallahamed, 2014a; Jung & Seock, 2017; Piaralal, Piaralal, & Bhatti, 2015; Sabharwal & Soch, 2011; Vázquez-Casielles, Suárez Álvarez, & Diaz Martin, 2010), Word of Mouth Behavior (Chen & Kim, 2017; Joosten, Bloemer, & Hillebrand, 2017; Maxham, 2001; Migacz et al., 2017; Singh, Singh, Crisafulli, & Crisafulli, 2016), Customer Loyalty (Bahri-Ammari & Bilgihan, 2017; Choi & Choi, 2014; Migacz et al., 2017; Nikbin, Marimuthu, Hyun, & Ismail, 2015; Simpe et al., 2015) and, ultimately, Customer

profitability (Hart, Heskett, & Sasser Jr, 1990; Hogan, Lemon, & Libai, 2003; Johnston, 2001; Rust, Lemon, & Zeithaml, 2004; Sandelands, 1994).

Sadly, despite of the firm's continuous efforts to make sure the prompt services, service failures can occurs at any stage. The telecom sector in particular, is suffering from this phenomenon where telecom operators have to deal with dual challenges; improve the network quality and to expand the network coverage simultaneously (Atta, 2016). But, still, the increasing trends of complaints against the telecom operators somehow comprehend the in-effectiveness of such initiatives (Atique, 2017). These increasing complaints cause dissatisfaction in customer that is turned into decline in the loyalty and will encourage complaint behaviors (Cai & Chi, 2018). Therefore, the actions taken by service provider to respond to service failure is more critical and they will be productive if initiated at the early stage of service failure (Chou, Hsu, & Goo, 2009). As argued by Gustafsson (2009) that an justifiable service recovery attempt will assist in minimizing the intensity of customer dissatisfaction caused from service failure and build the foundation for the reestablishment of damaged relationship, which will form customer loyalty in the long run (DeWitt, Nguyen, & Marshall, 2008).

The reviews of previous studies indicate that most of researchers have applied "outcome process classifications" for service failures and recovery strategies. Outcome failure refers to the inconvenience or unpleased feeling caused by the customer due to the outcome or service process failures attempts of service recovery (Gronroos, 1988; Parasuraman, Berry, & Zeithaml, 1991). In outcome related service recovery, customers are compensated through money, goods and time. Therefore, it can be termed as utilitarian theory. Meanwhile, process related theory is a symbolic theory

that offers status, esteem and empathy (Smith, Bolton, & Wagner, 1999). The main objective of this approach lies in the categorization of service recovery process from the perspectives of economic loss (outcome failures) and social or psychological loss (process failures) (Brinberg & Castell, 1982; Smith et al., 1999).

On the contrary, various contemporary researchers have employed the justice theory in order to respond and comprehend commendably with the service recovery. Over the time, justice theory framework have been used to examine the service recovery procedure by following the justice principles to reflect the customer satisfaction and loyalty in telecom sector (Bahri-Ammari & Bilgihan, 2017; Ibrahim & Abdallahamed, 2014a; Liao, 2007; Nor Sabrena Norizan, 2016a; Piaralal et al., 2015; Sabharwal & Soch, 2011; Simpe et al., 2015; Vázquez-Casielles et al., 2010). The justice framework has gained popularity as subscribers evaluate the effectiveness of service recovery. In this light, justice in service recovery framework is based on three dimensions: distributive justice, interactional justice and procedural justice (Choi & Choi, 2014; Homburg & Fürst, 2005; Kim & Kandampully, 2011; Tax, Brown, & Chandrashekar, 1998).

2.11.1 Conceptualization of Perceived Justice with Service Recovery

Justice theory focuses on effectiveness of perceived service recovery from three dimensions; distributive justice, procedural justice and interactional justice. The following section will discuss these three dimensions.

2.11.1.1 Procedural Justice

Procedural justice demonstrate the standard operated procedures followed by service provider to mitigate service failure (Nikbin, Ismail, Marimuthu, & Salarzehi, 2012).

The usefulness of procedural justice is depends upon the rationale thinking of firm for examples, confessing own fault and pushing sincere energies to fix the complaint in a well-timed way (Kuo & Wu, 2012; Lin et al., 2011). Fast reaction against the complaints will minimize the likelihoods of negative word of mouth , increase the possibility of customer loyalty and repurchase intentions (Lin et al., 2011). Moreover, procedural justice increases the chances of post recovery satisfaction (Nikbin, Ismail, Marimuthu, & Salarzahi, 2012; Siu, Zhang, & Yau, 2013).

2.11.1.2 Interactional Justice

Interactional justice refers to the fair treatment of service staff towards clients. This is normally reflected through their communication and treatment (Kuo & Wu, 2012; Tsai, Yang, & Cheng, 2014). In this regard, telecom operators should hire the best staff for their call centers and they are directed to deal with the customer complaints in timely manners. Furthermore, interactional justice should be reflected from the service personnel way of showing the keen concern, sympathetic and politeness in resolving the issues of complainants (Chang & Chen, 2013; Choi & Choi, 2014). A higher level of interactional justice will result into higher level of customer satisfaction and loyalty (Kuo & Wu, 2012). While the lower level of interactional justice will maximized the chances of manifestation of negative word of mouth from poorly treated customers (Lin et al., 2011).

2.11.1.3 Distributive Justice

Distributive justice deal with the perceptions of outcome fairness by the customers (Lin et al., 2011; Nikbin, Ismail, Marimuthu, & Armesh, 2012). It can also be defined as, when customer is satisfied from the compensation received against the loss

suffered from the service failures (Rashid, Ahmad, & Othman, 2014). Compensation can be served as the best source of minimizing damages caused from service failures and helps rejuvenate lost relationship (Bambauer-Sachse & Rabeson, 2015). Compensations can be in monetary or non monetary forms including, refunds, extra credit, repairs and exchanges (Choi & Choi, 2014; Lin et al., 2011). These practices are quite common in the telecom sector. In cases like sudden call drops due to network failure, telecom operators will either transfer the extra credit or offer the free talk time to the subscribers and in that way, service failure is rectified at the initial stage. Distributive justice enhances customer satisfaction, loyalty, repurchase intentions as well as it will influence the customer switching behavior (Kuo & Wu, 2012; Lin et al., 2011; Lopes & da Silva, 2015; Nikbin, Ismail, Marimuthu, & Armesh, 2012).

2.11.2 Studies on Perceived Justice with Service Recovery and Customer Loyalty

Service recovery is considered as a corner stone of success in the telecom sector. There have been a lot of studies conducted on the significance of perceived justice in service recovery. In this regard, Migacz et al. (2017) conducted a study to investigate the structural relationship between perceived justice in service recovery and customer loyalty in the airline industry of USA. The main focus of this study is assessment the airline traveler's perception towards service recovery processes based on justice theory. Results of the study confirmed a significant positive impact of perceived justice on customer loyalty. Similarly, Aisyah Yaakob and Othman (2016) conducted in the Malaysian telecom sector to investigate the impact of perceived justice with

service recovery on customer loyalty. However, the findings of this study exhibit the insignificant relationship between perceived justice and customer loyalty.

Nadiri (2016b) conducted a study in Dubai to measure the relationship between justice and post purchase behavior (loyalty) in retail banking sectors operating in Dubai. Results of the study revealed significant positive relationship between the justice mechanisms and post purchase behavior. However, interactional justice shows the strongest impact on post purchase intentions. Nor Sabrena Norizan (2016b) conducted a study in the Malaysian telecom sector and examined the link between perceived justice with service recovery and customer loyalty. The study found the significant positive relationship between perceived justice with service recovery and customer loyalty.

Choi and Choi (2014) examined the relationship between perceived justice with service recovery and customer loyalty. It was revealed that perceived justice with service recovery significantly and positively associated with customer loyalty. On the contrary, Primus (2013a) found an insignificant relationship between interactional justice and customer loyalty in The Malaysian telecom sector while Qin et al. (2012) conducted a study to investigate the link between perceived justice and customer loyalty in China. Results of the study confirmed insignificant direct relationship between interactional and procedural justice with customer loyalty. Lee et al. (2011) conducted a study in the Korean retail sector to investigate the impact of perceived justice with service recovery on recovery satisfaction and loyalty. The findings from the structural equation modeling showed the significant positive relationship between perceived justice with service recovery, recovery satisfaction and customer loyalty. Moreover, Dayan et al. (2008) conducted a study in UAE banking sector to

investigate the relationship between perceived justice and customer loyalty. However, the study has shown mixed findings from conventional and Islamic banks operating in the UAE.

In a nut shell, it can be concluded that the studies on the relationship between perceived justice with service recovery and customer loyalty in service recovery have shown mixed results. This inconsistency in scholarly literature about this relationship calls for more research for the better generalizability and to fill the knowledge gap. Table 2.9 summarizes the previous studies examining the link between perceived justice with service recovery and customer loyalty.

Table: 2.9

Summary of studies on Perceived Justice in service recovery and customer loyalty

Author	Country	Industry	Analysis Tool	Findings
Migacz et al. (2017)	USA	Airline	SEM	Significant
Aisyah Yaakob and Othman (2016)	Malaysia	Telecom	SEM	In-significant
Nor Sabrena Norizan (2016b)	Malaysia	Telecom	SEM	Significant
Nadiri (2016b)	UAE	Banking	Regression	Significant
Choi and Choi (2014)	USA	Multiple Industries	SEM	Significant
Primus (2013a)	Malaysia	Telecom	SEM	In-significant
Qin et al. (2012)	China	E-Commerce	SEM	In-significant
Lee et al. (2011)	South Korea	Retailing	SEM	Significant
Dayan et al. (2008)	UAE	Banking	SEM	In-significant

2.11.3 Perceived justice with Service Recovery and Customer Satisfaction.

Increasing customer satisfaction has become one the most effective business tool in the competitive market. Customer satisfaction and loyalty significantly depends on their perception of fair treatment. Therefore, when customers encounter any service failure, a critical challenge will emerge, i.e. how to restore the customer satisfaction and retain the dissatisfied customer. Since, customer expects a fair service recovery from the service provider in order to restore their satisfaction and loyalty. This phenomenon is verified by Zemke (1993) who stated that the main goal service recovery efforts is to convert the dissatisfaction into satisfaction.

This has been proven that customers are becoming better informed and more demanding in their purchase of services. Therefore, service providers must ensure prompt service recovery of service failure in order to maintain customers' satisfaction and loyalty (Umashankar, Ward, & Dahl, 2017). Since, a dissatisfied customer will switch to another brand (telecom operator) or may spread negative word of mouth, it is necessary to resolve customer dissatisfaction (Jung & Seock, 2017). In this regard, contemporary researchers are devoting considerable attentions towards service recovery strategies because of their proximity with the customer satisfaction, loyalty and development of long term relationship with customers (Jung & Seock, 2017; Maxham III & Netemeyer, 2002; Maxham, 2001; McCollough, Berry, & Yadav, 2000). Moreover, previous studies revealed perceived justice with service recovery are strong predictors of customer satisfaction (Chen & Kim, 2017; Joosten et al., 2017; Jung & Seock, 2017; Siu et al., 2013; Wen & Geng-qing Chi, 2013) and effective attempt of justice in service recovery will eliminate customer dissatisfaction (Kuo et al., 2013; McCollough et al., 2000).

Likewise, perceived justice with service recovery confirms a significant positive effect on customer satisfaction in the subsequent studies conducted in the telecom sector (Bahri-Ammari & Bilgihan, 2017; Ibrahim & Abdallahamed, 2014a, 2014b; Lee, Siu, & Zhang, 2017; Piaralal et al., 2015; Sabharwal & Soch, 2011; Vázquez-Casielles et al., 2010). Therefore, we can conclude that seminal effects of justice with service recovery strategies on customer satisfaction will provides a strategic assistance in devising the proven mechanism against service failures in the telecom sector (Bahri-Ammari & Bilgihan, 2017).

2.12 Relational Bonds

The benefits of relational strategies have been well understood and largely established in all business fields nowadays. customer loyalty has gained importance in the development of long term relationship with customer. However, relational bonds to customer loyalty relationship has not been fully explored (Lima & Fernandes, 2015). Review of past and contemporary have posited that relational bonds have gained a great attention in customer loyalty literature (Ragel & Newton, 2017; Shammout, 2018). The core objective of relationship marketing is to “Establish, Maintain and Enhance” mutually bounded relationship with the customers and other key stake holders (Datta, 2018).

In view of this, relational bonds have maintained the central role in retaining customer's loyalty towards the service providers. Ragel and Newton (2017) asserted by referring Roberts, Varki, and Brodie (2003) that “one strategy that has gained the considerable attention is the relationship marketing strategy in which company invest in relational bonds to foster the loyalty in customers”. They further concluded that the

aim of this strategy is just not limited to the accomplishment of customer loyalty but also provides a strong foundation to gain the competitive advantage over the competing firms. Likewise, Shammout (2018) & Shammout et al. (2007) opined that relational bonds assist in the development of mutual ties between customers and firms this will foster the customer retention through customer loyalty. In the same vein, Lima and Fernandes (2015) maintained that firms must used social and structural ties through relational bonds, this will facilitate them to remain competitive through enjoying the fruits of loyalty.

2.12.1 Nature and Conceptualization of Relational Bonds

Bowlby (1969) was the first who defined bond as the major determinants of a relationship in a particular social interaction. Turner (1978) define bonds as “the psychological, emotional, economic or physical attachment in a relationship that are fostered by association and interactions, and that serve to bind parties together under a relational exchange”. Meanwhile, Gwinner, Gremler, and Bitner (1998) and Liljander (2000) defined as “the advantages that the customer enjoy or perceive in a relationship, in addition to the core products”. However, Liljander (2000) further argued that the psychological benefits and psychological bonds, social benefits and social bonds, economic benefits and financial bonds, customization benefits and knowledge bonds and time saving with time bonds, all are the examples of relational benefits proposed by Gwinner et al. (1998) can be treated similarly with the relational bonds proposed by Berry (1995) & Liljander (2000).

Additionally, Liljander (2000) reduced the ambiguity between positive bonds and relational bonds by making the clear distinction between positive and negative bonds. He further argued that one relational bond can be positive or negative at the same time

and it will be determined through the prevailing situation. For example, customers who are having bad experiences with the products or service and want to change it but cannot change due to financial constraints, or probabilities of losing money by doing that could be recognized as the economic bond/switching cost bond (one of the types of relational bonds). On the other hands, due to the economic benefits, financial bonds can be perceived as the positive bonds because it will allows the financial benefits in the discounts, allowance (in telecom sector, free talk time, extra balance, free MBS, free SMS or lower rates on calling to designated friends and family numbers). This view is analogous to the definition of Arantola (2002), which defined the bonds as “perception by the customer disincentive for switching suppliers. The context of bond is a relationship. Negative bonds are barriers to exit when customer has an incentive to leave the relationship, while positive bonds are incentives to continue the relationship even when there is a probability of switching”.

Furthermore, Arantola (2002) enhanced the role of relational bonds based on her through analysis of previous studies, by discovering three additional bonds: potential and residual bonds; operational and relational bonds; and higher v/s lower order bonds. First, operational bonds can be offered right after the starting of the partners relationship (buyer v/s seller), upon the absence of economic exchange. Residual bonds are granted on the continuity of relationship. Operational bonds are offered for the smooth functioning of routine business operations. Whilst relational bonds are preliminary based on the mutual expectation of future interactions. Lastly, Arantola (2002) divided the third bonds into higher-order bonds and lower-order bonds. Higher order bonds involve Attraction, Trust and Commitment, while lower order bonds are financial and social.

Snehota and Hakansson (1995) and Holmlund and Kock (1995) have defined bonds from the industrial marketing perspectives and define it as “the outcome of adaptations and investments made by the interacting partners aiming at higher efficiency and more cost effective exchange”. Moreover, defined bonds under the B2B context, by following the basic principle of Smith (1998) & Turner (1970), and added the additional components while conceptualizing the relational bonds as the “psychological, economic, emotional or physical attachment in a relationship that are fostered by association and attraction and serve to bind parties together under relational exchange” It is for sure inconsistency found on the nature and conceptualization of relational bonds among the academics scholars. This phenomenon is rightly addressed Shammout (2018) by arguing that definition of bonds varies as every researchers have defined it based on their own contexts or judgments. Before being used in Marketing, bonding theory was first used in Psychology. Three types of bonding strategies were used by the scholars of relationship marketing research; Financial Bonding, Social Bonding, and Structural Bonding that was introduced by Berry and Parasuraman (2004).

Customer loyalty is one of the most important contributing factors of relationship marketing. Relational bonds revealed a significant impact on customer loyalty and having central importance in examining customer relationships (Lima & Fernandes, 2015). However, review of past study revealed that relational bonds have been studied generally, either conceptually (Arantola, 2002) or the context of B2B (Buttle, Ahmad, & Aldlaigan, 2002; Schakett et al., 2011), thus they are yet to not be fully explored (Arantola, 2002; Lima & Fernandes, 2015). Relational bonds help firms to develop long term relationships with customers. They can serve as benefits or exit barriers and

generates different mind sets towards the company or its products or services. this will directly affect the loyalty towards the service providers (Lima & Fernandes, 2015). In the meantime, In relationship marketing theories and practices, relational bonds have confirmed as the most essential tools of relationship development (Arantola, 2002; Chai, Malhotra, & Dash, 2015; Dwyer, Schurr, & Oh, 1987; Hsieh, Chiu, & Chiang, 2005; Liljander, 2000; Lin et al., 2003; Smith, 1998; Wen-Hung, Liang, & Yung-De, 2006; Wilson, 1995; Wulf, Odekerken-Schröder, & Iacobucci, 2001). In a nutshell, relational bonds are the most significant predictor of customer loyalty and helped the firm in long term relationship development with the customer. The following session will briefly elaborate the dimensions of relational bonds.

2.12.2 Dimensions of Relational Bonds

Long- term survival of business heavily depends upon the development of long term relationship with customers. Firms can prolong their relationship by investing in relationship especially investing in the relational bonds will maximizes the layoffs. Furthermore, it was Lin et al. (2003) who recommend to develop a lasting relationship through offering relational bonds. Wilson (1995) recommended offering structural and social bonds while Berry (1995) recommended the use of types of bonds (financial, social and structural). The cited author has also pointed out that these bonds should be employed in three levels for better effect on customer attitudinal and behavioral loyalty. Firms must start offering price incentives (financial bond) However; this could becomes the weakest tool because competitor can easily replicate it by offering more attractive incentives.

At the second level, firms must try to establish social linkage (social bonds) with the customers, like sending them greetings on special occasions or arranging a get-together. This is somewhat more productive compared to financial bonds and cannot be easily replicated by competitors. The last level is based on the development of structural mechanism (structural bonds) to deal with the problems by offering tailor made solutions. This bond will leads to competitive advantage and rated as the top priority. Other researchers (Chiu, Hsieh, Li, & Lee, 2005; Hsieh et al., 2005; Lin et al., 2003) have implemented the same approach in their respective researches.

2.12.2.1 Financial Bonds

Financial bonds comprises of special pricing considerations (Gwinner et al., 1998). Review of past literature have revealed that switching costs or in some instances switching barriers as the significant determinants of financial bonds (Lima & Fernandes, 2015). Switching barriers are a result of a customer's perception of time, money, and psychological effort required to change from one service provider to another. It particularly includes search and learning costs that switching involves (Jones, Mothersbaugh, & Beatty, 2002). These insights help customers to develop competencies required to optimally use a given product. In this regard, the capabilities are likely to be firm specific and cannot be transferred perfectly to competitors' product offerings (Brush, Dangol, & O'Brien, 2012). If switching cost is high it will stick the customer. Switching costs will most likely retain customers in the firm and make them consume their complementary products. Switching costs includes costs of searching for a new service provider; the loss of a friendly and comfortable relationship; having to bear learning cost; explain individual preferences; risk perceptions; or loss of special privileges (Klemperer, 1995). Moreover, Shapiro and

Varian (2013) argue that firms must offered financial benefits to the customer in order to make sure their satisfaction and loyalty with the firm.

2.12.2.2 Social Bonds

Social bonds refer to personal ties which include perceived feelings of “familiarity, personal recognition, friendship, rapport and social support” (Klemperer, 1995). Customers stem social bonds from long-term relationships with service firms. The indirect influence of social benefits on word-of-mouth communication through commitment can also be considered (Hennig-Thurau, Gwinner, & Gremler, 2002a). This bond can be recognized in addition to the paybacks received in the distribution of the core service, as a kind of mixing that can occur between customers and employees. More the mixing of customer and employee higher the bond will be. This bond will result in loyalty (Hennig-Thurau et al., 2002a). Employees need to come out of their comfort zone and engage with customers.

2.12.2.3 Confidence Bonds

Confidence bonds are defined as “perceptions of reduced anxiety and comfort in knowing what to expect in the service encounter” (Hennig-Thurau et al., 2002a). If the risk in service provided is reduced then trust would be developed between customer and marketer. By this customer satisfaction will also get improved (Berry, 1995) Trust creates benefits for the customer. The benefits includes relationship efficiency through decreased transaction costs that in turn nurtures his or her commitment and loyalty to the relationship (Garbarino & Johnson, 1999). Confidence and trust are the key factors. This would benefit the long-term relationship.

Customers perceive that there are comparable quality providers in the market. Thus, these bonds are perceived to be highly important in retaining relationships.

2.12.2.4 Emotional Bonds

Customer develops some sort of emotional attachment with brands. Customers develop deep emotional bonds with brands (Grisaffe & Nguyen, 2011). The relational bonds indicate that there must be sense of comfort and security between customer and marketer, and customer towards service or particular brand (Spake, Beatty, Brockman, & Crutchfield, 2003). Customer who has emotional bonding with particular product or service would benefit marketer a lot, customer would be ready to pay premium price for it. Hence customer can charge with premium prize (Thomson, MacInnis, & Park, 2005). This feeling towards product or service will be created over time and needs effort to build the relationship.

2.12.3 Studies on Relational Bonds and Customer Loyalty

Customer loyalty is one the major component of enhancing the survival of a business and vital for the development of long term relationship with the customer, particularly in the highly competitive markets. Reviews of past and contemporary studies have revealed relational bonds as the most significant predictor of customer loyalty, and vital tool of long term relationship development. Indeed, due to the empirically and theoretically driven significance of relational bonds as relationship development tools considerable studies have been conducted in the diverse sector like Banking, Hotel, E-Commerce, B2B, Retailing, Theme parks and Education (Abubakar & Mokhtar, 2015a; Gu et al., 2016; Jouali & Chakor, 2013; Lima & Fernandes, 2015; Mohd Noor et al., 2015; Shakerian, Sadrabadi, Saliani, & Dehnavi, 2017; Wu & Lin, 2014).

Nonetheless, an extensive review reveal only one study in the telecom sector in Sri Lanka (Ragel & Newton, 2017). Furthermore, Ragel and Newton (2017) poised that research in this area particularly in the telecom sector is still at infancy stage. This surely exemplifies a significant gap in the literature of relationship marketing.

Ragel and Newton (2017) conducted a study to investigate the impact of relational bonds on customer satisfaction and loyalty in Sri Lankan telecom sector. Results of the study confirmed significant direct and indirect effect of relational bonds on customer loyalty. Gu et al. (2016) conducted a study to investigate the impact of relational bonds on user satisfaction and loyalty in context of social networking sites in China. Results of the study revealed the insignificant direct effect of relational bond on customer loyalty. Yet, in another study, relational bonds was found to have insignificant impact on customer loyalty in another study conducted in the banking sector of Indonesia (Endang Prihatiningsih, 2016b). While, relational bonds was revealed to be a significant positive predictor of customer loyalty in service sector of New Zealand (Anil Bilgihan et al., 2015).

Lima and Fernandes (2015) Investigated the impact of relational bonds (economic, social, confidence and emotional bonds) on customer loyalty in the three services classification i.e. search services (TV operators), experience services (hair dressers) and credence services (health services). However, the study revealed mixed results such as: social, emotional and confidence bonds revealed more significant impact on the customer loyalty. While, economic and switching costs based bonds have shown less significant impact on the customer loyalty. Furthermore, emotional and confidence bonds revealed significant impact on hair dresser as compare to TV operator while these bonds have shown significant impact on the loyalty of health

care customers as compare to TV operators. However, the relational bonds were found as the significant direct predictor of customer loyalty in two consecutive studies conducted in education sector of Nigeria (Abubakar & Mokhtar, 2015a, 2015b).

Adiwijaya (2014a) established a study to confirm the impact of relationship bonds on customer loyalty in the three groups of customers (stayers, dissatisfied switchers, and satisfied switchers). Surprisingly, the study revealed mixed results such as: financial and social bonds have shown significant impact on stayers' loyalty. Whereas, structural bond established a significant impact on dissatisfied switcher's loyalty and social bonds on satisfied switchers. Sarwari and Minar (2014) conducted a study in Bangladeshi hotel industry to examine the relationship between relational bonds and customer loyalty. The result of the study shows the insignificant direct relationship between relational bonds and customer loyalty. In the similar vein, insignificant relationship between relational bonds and customer loyalty was derived from another study conducted in Saudi Arabian telecom sector by Nsour, (2013).

In addition, Huang et al. (2014) investigate the impact of relational bonds on attitudinal loyalty in Taiwan. Results of the study confirmed significant impact of relational bonds on attitudinal loyalty. Furthermore, the impact of relational bonds on relationship quality and E-loyalty with respect to three categories of online goods /services (search, experience and credence) were examine by Lin and Chung (2013). However, the study revealed mixed findings such as, financial bonds confirmed significant direct impact on E-loyalty of search goods/service. While, social bonds for experience and structural bonds revealed a significant impact on credence goods/services. In the similar vein, the subsequent studies revealed the mixed findings with respect to the direct relational bonds with customer loyalty (Chiu, Lee, Hsieh,

& Chen, 2007; Nsour, 2013; Shammout et al., 2007; Shammout, Zeidan, & Polonsky, 2006).

From the review of above studies, it can be seen that relational bonds has been investigated in a diverse way. Moreover, the results were indeed inconsistent; most of the studies have indicated the significant relationship between relational bonds and customer loyalty while others have shown insignificant relationship. The following table is presenting the summaries of past studies.

Table: 2.10
Summary of studies on Relational Bonds

Author	Country	Industry	Analysis	Findings
Ragel and Newton (2017)	Sri Lanka	Telecom	SEM	Significant
Gu et al. (2016)	China	Social Networking	SEM	In-significant
Endang Prihatiningsih (2016b)	Indonesia	Banking	SEM	In-significant
Anil Bilgihan et al. (2015).	New Zealand	Service Industry	SEM	Significant
Lima and Fernandes (2015)	UK	Multiple Services	Multivariate Analysis	Significant Mixed Results
Abubakar and Mokhtar (2015a)	Kenya	Education	SEM	Significant
Abubakar and Mokhtar (2015b)	Kenya	Education	SEM	Significant
Adiwijaya (2014a)	Indonesia	Banking	SEM	Significant Mixed Results
Sarwari and Minar (2014)	Bangladesh	Hotel	SEM	In-Significant Mixed Results
Huang et al. (2014)	Taiwan	Retailing	SEM	In-Significant
Lin and Chung (2013)	China	E-Commerce	Regression	Significant Mixed Results
Nsour, 2013	KSA	Telecom	Regression	In-Significant
Chiu et al., 2007	Taiwan	Securities Industry	SEM	Significant Mixed Results

The review of stated studies shows that the relationship between relational bonds and customer loyalty been extremely discussed in diverse industries like Hotel, Security, E-commerce, Retail and Banking. However, dearth of studies conducted in the telecom sector. Recently, Lima and Fernandes (2015) strongly recommend to conduct the more studies on relational bonds in the competitive service sectors for the better generalizability of the results. In addition to that Alnaimi (2012b) opined that dearth of studies was found on the link between relational bonds and customer satisfaction.

2.12.4 Relational Bonds and Customer Satisfaction

In the relationship marketing literature, customer satisfaction has been defined from affective state perspectives without cognitive components (Alnaimi, 2012a). As confirmed by Mano and Oliver (1993) affective based mechanisms are more important than cognitive based components for the execution of customer satisfaction. Particularly, For measuring the customer satisfaction in terms of long-term relationship interactions (Ndubisi, Malhotra, & Wah, 2008; Shemwell, Yavas, & Bilgin, 1998). The same relationship is confirmed in his research by (Sanzo, Santos, Vázquez, & Álvarez, 2003). In addition to that, these types of relationship can be measured on the basis of economic and non-economics satisfaction on the following grounds. Firstly, when any partner demand a reward against the relationship continuation, financial rewards in the form of financial bonds can be offered and in turn, economic-based satisfaction will be obtained from the partner on the basis of effective components (Liang & Wang, 2005).

Mohd Noor et al. (2015) Have confirmed this phenomenon in their research based the impact of relational bonds on the economics and social satisfaction between

manufacturers and large retailers in Yemen. Secondly, satisfied participant will enjoy his work with its counterparts more particularly with those which are involve in social welfare (Palmatier, Dant, Grewal, & Evans, 2006) . In this situation non- economic based satisfaction will be more productive and firms can offer social bonds to develop the social tie up with their partners. Moreover, economic and non-economic satisfactions can be attained through financial and social bonds. Thus, different bonds are required to accomplish the different levels of satisfactions (Liang & Wang, 2005). In the same vein, (Abubakar & Mokhtar, 2015a; Sanzo et al., 2003; Schakett et al., 2011; Ziaullah et al., 2014; Zineldin & Jonsson, 2000) revealed that relational bonds has significant effect on customer satisfaction and different bonds are required to maintain the strength of relationship. In addition to that, recent empirical researches in the different industrial setup have also confirmed the significant impact of relationship bonds on the various constructs like, perceived value, trust and satisfaction (Lin et al., 2003; Wu & Lin, 2014), satisfaction, trust and commitment (Jouali & Chakor, 2013).

2.13 Customer Satisfaction

Customer satisfaction refers to customer's fulfillment of desired benefits from the product or service and verdict of accomplishment stage (Oliver, Rust, & Varki, 1997). Customer satisfaction can also be defined in terms of customer's evaluation about the differences between the cost of obtaining the product and their benefits (Churchill Jr & Surprenant, 1982). Attainment of customer satisfaction is one the ultimate objective of the firm because customer satisfaction will serve as base lines for the development of long term relationship as well as it will safe guard against the uncertainties. Customer satisfaction can be high or low and its solely depends on the comparative

quality of products or services i.e. high quality will lead to high satisfaction while low quality will cause low satisfaction (Alam et al., 2016; Gerpott et al., 2001).

Nevertheless, customer expectations never remains same so firms must measure the customer's expectations on regular basis to satisfy the customers in better way (Hutcheson & Moutinho, 1998; Santouridis & Trivellas, 2010).customer satisfaction will bring positive results like, increase in profitability, customer retention and loyalty, and positive word of mouth (Aksoy, Buoye, Aksoy, Larivière, & Keiningham, 2013; Aktepe, Ersöz, & Toklu, 2015; Bayraktar, Tatoglu, Turkyilmaz, Delen, & Zaim, 2012; Chang, 2015; Kim, Wong, Chang, & Park, 2016; Kim, Chang, Park, & Lee, 2015; Kumar, Dalla Pozza, & Ganesh, 2013; Maxham & Netemeyer, 2002; Muhammad et al., 2016).

However, customer dissatisfaction will be resulted into customer switching, negative word of mouth, decline profit. Furthermore, Bodet (2008) opined customer satisfaction as the main factor of measuring the company's internal and external performances and major tool of resource allocation. Ahmad et al. (2010) Acknowledged that "customer satisfaction is worthless while "customer loyalty is priceless". According to Omachonu, Johnson, and Onyeaso (2008) customer satisfaction is based on psychological discrepancies between emotions and expectations. Satisfied customer will not modify the purchasing behavior and reveal retained purchasing behavior (Gerpott et al., 2001). Maxham and Netemeyer (2002) maintained that satisfied customers were less likely to spread negative word of mouth and even are reluctant to record complaints.

Meanwhile, Garbarino and Johnson (1999) defined satisfaction in terms of the degree to which products or service will meet the customer's expectations in terms of fulfillment of their needs and wants better than the competitors. In a nut shell, customer satisfaction revealed as the base line for the development of long term relationship as well as it will have a significant impact of customer loyalty, profitably, positive word of mouth on the other side dissatisfaction will lead towards failure and vice versa.

2.13.1 Customer satisfaction and Loyalty

Review of past studies affirmed customer satisfaction as the most important pillar of loyalty and has been found as a significant predictor of customer loyalty (Aksoy et al., 2013; Aktepe et al., 2015; Bayraktar et al., 2012; Chang, 2015; Kim et al., 2016; Kim et al., 2015; Kumar et al., 2013; Muhammad et al., 2016). Likewise other sectors, customer satisfaction has revealed as the significant predictor of customer loyalty in the telecom sector and dully verified from the empirical results of the various studies such as: Muhammad et al. (2016) examined the impact of customer satisfaction on customer loyalty in the Pakistani telecom sector. The result of the study has shown the significant positive impact of customer satisfaction on loyalty.

In the similar vein, significant positive relationship between customer satisfaction and loyalty were established in the subsequent studies conducted in Korean mobile phone industry (Kim et al., 2016; Kim et al., 2015), Pakistani (Khan, 2012a), Sri Lankan telecom sector (Karunanithy & Rasanayagam, 2013a), Iran (Alireza, Ali, & Aram, 2011), China (Tung, 2013). Besides, Aksoy et al. (2013) conducted a cross-cultural study in which data were collected from eight countries (e.g., Australia, China, France, Brazil, Canada, Spain, UK & USA). Results of the study revealed significant

positive impact of customer satisfaction on customer loyalty in the telecom sector while customer satisfaction is strongly influenced by the cultural variations across the countries.

Numerous marketing studies such as (Aydin & Özer, 2005; Deng et al., 2010; Lai, Griffin, & Babin, 2009; Morgan & Govender, 2017a; Nasir et al., 2014; Razzaq et al., 2018; Yeboah-Asiamah et al., 2016) have found the significant link between Customer satisfaction and loyalty in the telecom sector, on the contrary, few studies (Boohene & Agyapong, 2011; Hafez & Akther, 2017; Muturi et al., 2013; Omar, Alam, & Aziz, 2011; Ram et al., 2016; Yusoff et al., 2017) found that the relationship between customer satisfaction in telecom sector is insignificant.

Based on the review of literature, it can be seen that the relationship between customer satisfaction and customer loyalty is inconsistent; as many studies indicate the significant relationship, and others have shown the insignificant relationship. This phenomenon calls for more investigation on the association between customer satisfaction and customer loyalty in different context for the better understanding and generalizability. This has been rightly addressed by Kumar et al. (2013) who, stated that “there is a common belief that customer satisfaction has significant positive effect on customer loyalty based on the empirical results of diverse studies”. In the mean time, customer satisfaction cannot affect the customer loyalty all the time because customer satisfaction is based on the customer expectations and these are vulnerable in nature by the passage of time so there is no hard and fast rule that customer satisfaction will always predict the customer loyalty. However, inclusion of mediator or moderator variables can be handy for predicting the customer loyalty. The

following table demonstrates the summary of studies on customer satisfaction and loyalty in telecom sector.

Table: 2.11

Summary of studies on customer satisfaction and loyalty in telecom sectors

Author	Country	Industry	Findings
Razzaq et al. (2018)	Pakistan	Telecom	Significant
Morgan and Govender (2017a)	South Africa	Telecom	Significant
Yusoff et al. (2017)	Turkey	Telecom	In-significant
Hafez and Akther (2017)	Bangladesh	Telecom	In-significant
Ram et al. (2016)	India	Telecom	In-significant
Irfan et al. (2016)	Pakistan	Telecom	Significant
Karunanithy and Rasanayagam (2013a)	Sri Lanka	Tourism	Significant
(Tung, 2013)	China	Telecom	Significant
Aksoy et al. (2013)	UK	Telecom	Significant
Muturi et al. (2013)	Kenya	Telecom	In-significant
Khan (2012a)	Pakistan	Telecom	Significant
Alireza et al. (2011)	Iran	Telecom	Significant
Boohene and Agyapong (2010)	Malaysia	Telecom	In-significant

Prior researches have thoroughly examine the various antecedents of loyalty and stressed upon the importance of customer loyalty in service sector (Zeithaml et al., 1996). Despite of the importance devoted by the practitioners to the customer loyalty, it remains the important and challenging point of concerns for the practitioners and academic researchers especially in the current competitive scenario to find the most appropriate antecedent of customer loyalty (Nyadzayo & Khajehzadeh, 2016). Although emphasis has been given to conceptualizing the relationship between the antecedents of loyalty, existing literature on antecedents of loyalty still reports inconsistent findings and this sets pressures on the practitioners in general and

academic researchers particular to further investigate and fill the existing knowledge gap (Bolton, 1998; Kumar et al., 2013). Particularly, researchers are required to investigate the antecedents of loyalty by incorporating the mediating and moderating constructs so that the link between loyalty and other constructs could be explored (Kumar et al., 2013).

Mediator and moderating variables have been used to examine the link between exogenous and endogenous variables. Both have the ability to strengthen or weaken the underlying relationships. Mediator provides supplementary information about the strengths of relationships between two or more variables and moderating variable probes into the possible reason behind the weak relationship between two or more than two variables that were expected to have strong relationship. In addition to that, moderating variable affects the form (slope) or the strength of relationship between various variables (Walsh, Evanschitzky, & Wunderlich, 2008).

Corporate image could moderate the relationship between customer satisfaction and customer loyalty in this study. It is believed that customer always has an expectation gaps that drive their purchasing decisions, in most of cases, customer's expectation is strongly driven by a firm's corporate image where a good corporate image will strongly influence the customer's perceptions on the firm's product or service. Customers are psychologically satisfied with firms with a good corporate image because they believe that this firm will provide the best value for money. Consequently, psychologically satisfied customer tends to be more loyal with firms. Importantly, customers wanted to associate themselves with firm's with good corporate image.

2.13.2 Customer Satisfaction as a Mediator

The review of empirical research revealed customer satisfaction as an significant mediator between various constructs and customer loyalty (Ali & Muqadas, 2015; Caruana, Pitt, & Ramasashan, 2015; Cheng & Rashid, 2015; Hussain, 2016; Kaura et al., 2015; Matzler, Strobl, Thurner, & Füller, 2015; Mittal & Mittal, 2016; Pereira, de Fátima Salgueiro, & Rita, 2016; Rahman, 2016; Rama & Panda, 2015; Saleem, Zahra, Ahmad, & Ismail, 2016; Shi, Prentice, & He, 2014). It was highlighted that customer satisfaction has successfully performed the meditational role between customer satisfaction and loyalty in the telecom sectors. In this regard, Sarkindaji et al. (2015) in their investigation of student retention in Nigerian institutes established that customer satisfaction partially mediates the service quality dimensions and students loyalty. Yuktanandana and Prasertsakul (2015) studied the impact of service quality on telecom subscriber loyalty in Taiwan. Results of the study confirmed a full mediation of customer satisfaction with service quality and customer loyalty relationship. Moreover, In another study, conducted in India by (Thakur & Singh, 2011) it was found that customer satisfaction fully mediates the relationship between service quality and customer loyalty.

Ahmed, Nawaz, Usman, Shaukat, and Ahmed (2010) observed the effects of service quality dimensions on the customer satisfaction and loyalty in the selective universities of Lahore, Pakistan. In this survey they found that service quality dimensions partially affect the customer satisfaction while empty revealed a negative impact on customer satisfaction while customer satisfaction revealed a positive relationship with customer loyalty. Moreover, customer satisfaction fully mediates in the relationship between service quality and customer loyalty. While, Akbar and

Parvez (2009) found the full mediation effect of customer satisfaction in the relationship between service quality and customer loyalty in the Bangladeshi telecom sector. Likewise, another study found that customer satisfaction fully mediates with service quality and loyalty in Egyptian telecom sector. Whereas, service quality has shown a significant impact on customer satisfaction in turn customer satisfaction significantly affect the customer loyalty in the telecom sector Greece. In addition, the results showed a fully mediation effect of customer satisfaction on loyalty (Santouridis & Trivellas, 2010).

Reviews of past studies have confirmed the mediating effect of customer satisfaction on the relationship between perceived price fairness and customer loyalty. Kaura et al. (2015) studied the impact of perceived price fairness on customer satisfaction and loyalty in the Indian banking sector. In this study authors found that customer satisfaction fully mediates between the relationship of perceived price fairness and loyalty. In the similar vein, Rothenberger (2015a) found a fully meditational role of customer satisfaction between price fairness and attitudinal loyalty. Moreover, Estalami et al. (2007) measured the impact of customer satisfaction directly and indirectly through price acceptance and price fairness and established the significant impact from both perspectives. Additionally, Han and Ryu (2009) established the full mediating role of customer satisfaction in the relationship between price fairness and customer loyalty. While, Antón, Camarero, and Carrero (2007) study revealed mediating role of customer satisfaction with customer loyalty in context of price unfairness.

Perceived justice with service recovery is one of the main predictor of customer satisfaction and loyalty. Consequently, the review of past studies highlighted the

significant mediating role of customer satisfaction on the relationship between perceived justice with service recovery and customer loyalty. Assefa (2014) established a significant impact of perceived justice on customer satisfaction and in turn, customer satisfaction positively influenced customer loyalty in Ethiopia. Similarly, Siu et al. (2013) conducted a study in China to confirm the relationship between perceived justice dimensions, customer satisfaction and loyalty. the results of the study revealed significant mediating roles of post recovery satisfaction with perceived justice in service recovery and customer loyalty.

Fierro, Polo, and Oliván (2014) confirmed a significant relationship of perceived justice with service recovery customer satisfaction, as consequently showed that customer satisfaction has a significant impact on customer loyalty in the Spanish telecom sector. Chang and Chang (2010) study revealed significant impact of perceived justice on customer satisfaction, in turn satisfaction significantly influenced the customer loyalty in airline industry of Taiwan. Whereas, Namkung and Jang (2009) revealed mediating role of customer satisfaction between interactional fairness and behavioral intention (loyalty) in USA. Maxham and Netemeyer (2002) confirmed a partial meditational role of customer satisfaction between perceived justice with service recovery and purchase intention along with on word of mouth intentions.

Relational bonds have been considered as the effective predictors of customer satisfaction and loyalty. Review of studies has confirmed the mediating role of customer satisfaction between the relationship of relational bonds and customer loyalty. Recently, Ragel and Newton (2017) established significant impact of relational bonds on customer satisfaction and as a result customer satisfaction significantly impacts customer loyalty in Sri Lankan telecom sector. Meanwhile, in

another study, customer satisfaction partially mediate between the relationships of relational bonds and users loyalty (Gu et al., 2016). Whereas, Abubakar and Mokhtar (2015b) investigated the impact of relational bonds on loyalty with the mediating effect of customer satisfaction in the Nigerian higher educational institutes. Results of the study revealed a fully mediation of customer satisfaction in the relationship between relational bonds and loyalty. Besides, customer satisfaction fully mediates between the relationship of relational bonds and student satisfaction (Abubakar & Mokhtar, 2015a).

2.14 Corporate Image as Moderator

From the last few decades, Marketing researchers and academicians are focusing on the implantation of customer relationship management in the organization. Consequently, there was a need to explore any relational tool which will coordinate the public relation with the corporate level (Gouji, Taghvaei, & Soleimani, 2016). Therefore, the concept of corporate image has been emerged in order to develop the organizational goodwill and reputation in the industry. In majority of the situations customer's expectation heavily depends upon the corporate image, and they will prefer to purchase from firms having good corporate image (Muturi et al., 2013). Perceived value of customer is heavily based on the self-perceptions about the value expecting from the firms. Thus, firms with good corporate image can be in a better position to win the customer loyalty (Muturi et al., 2013).

Customer perceived service quality also depends heavily upon the corporate image as customer will expect a superior service from the firms having good corporate image. Similarly, customer perceived level of satisfaction or dissatisfaction also depends upon the perceived corporate image as customer expect fair and preferential treatment

based on their expectations from the firm with good image (Muturi et al., 2013). Moreover customer will prefer to purchase from the companies who will maintain their corporate image. Corporate image may enhance the customer satisfaction and in return it will bring a positive impact on customer loyalty. So, it can be concluded that corporate image plays a critical role in the relationship building more specifically, in good will development.

Review of past studies indicates that corporate image is a multipurpose construct for examples in some researches corporate image have been investigated as an independent variable for example, (Giovanis, Athanasopoulou, & Tsoukatos, 2016; Jani, 2015; Rahman, 2012), as a mediating variable (Cheng & Rashid, 2013; Huang & Lien, 2012). There are few studies in which corporate image have been studied as a moderating variable (Jha, Deitz, Babakus, & Yavas, 2013; Nguyen & Leblanc, 2001). In this study, we will investigate the corporate image as a moderator between the customer satisfaction and loyalty in the telecom sector. The justifications of taking corporate image as a moderating variables are mentioned bellow.

Corporate image have not been studied as a moderator between customer satisfaction and loyalty, particularly in the telecom sector. apart from Muturi et al. (2013) who investigates corporate image as a moderator between perceived service quality, perceived value, perceived social influence, perceived satisfaction and customer loyalty link in the Kenyan telecom sector. However, customer satisfaction was treated as an independent variable in this study. Furthermore, Muturi et al. (2013) suggested further examination of the corporate image as a moderator of customer loyalty in subsequent studies for the better generalizability. Particularly, these studies have stressed the need to investigate in the telecom sector of any other part of the world.

Nguyen and Leblanc (2001) investigated the impact of corporate image as a moderator with of corporate reputation and retention in the service industry and found a significant moderating role of corporate image in the relationship. It is therefore, suggested further studies should investigate the moderating role of corporate image. In the similar vein, Christou (2003) measures the retention and loyalty status of guest house clients with the moderating role of corporate image in the three European countries. The results of the study revealed a significant moderating role of corporate image in the determination of loyalty, and it was suggested that the moderating role should be investigated for better generalizability of results.

Rahmawati and Do (2015) investigate the impact of shopping motivation on purchase intentions with the moderating role of corporate image and loyalty programs and revealed insignificant moderating roles of loyalty programs, and corporate image on the purchasing motivation and purchasing intentions. However, a significant positive relationship was found between shopping motivation and repurchasing intentions. Likewise, Srivastava and Rai (2014) examined the moderating role of corporate image, trust, commitment and switching cost into the relationship between service quality and loyalty in the insurance industry and revealed a significant moderating effect of corporate image on customer loyalty.

In another study, Jha et al. (2013) found a positive significant moderating role of corporate image on customer attitudinal loyalty. While, Kamal Ghalandari (2012) studied the moderating role of corporate image between perceived justice, perceived values and repurchase intentions on online shopping in Iran. The results revealed that corporate image successfully moderates the relationship of investigated constructs. In the similar vein, Gautam (2011) found a significant moderating role of corporate

image into the relationship between perceived justice in service recovery satisfaction in Indian airline industry. The review of above studies suggests corporate image as a strong predictor of customer loyalty, and by considering this fact and the recommendations of the other researchers, this study will include corporate image as a moderating variable between customer satisfaction and loyalty in the Pakistan telecom sector.

2.15 Stayers and Switchers

Customers are becoming increasingly smarter, more demanding, and, at the same time, more exposed to unceasing publicity from intense market competition. They now have more choices. These trends are especially true in the telecommunications industry. As customers become more aware of their needs, retaining customer loyalty is becoming more challenging. Maintaining customer loyalty is no doubt the last resort for the firm to remain competitive and sometimes to ensure their survival. From the review of the previous literature, it has been confirmed that psychological state and behavior of one customer segment are totally diverse from the psychological state and behavior of customers from other segments (Ganesh et al., 2000; Keaveney & Parthasarathy, 2001; Purwanto, 2013). If a company can rightly identify the behavioral and attitudinal differences among the diverse groups of customers, service provider can easily utilize this information in the customer acquisition and more particularly in devising of suitable loyalty strategies. Moreover, review of past studies pertaining to customer loyalty highlighted two important issues that must be rightly addressed for the attainment of loyalty. First, should the entire customer be targeted with the similar loyalty programs and tactics? Second, what is the surety that loyalty customer will not switch again due to uncontrollable factors?

According to Ganesh et al. (2000) not all customers should be targeted with retention programs and that even some of the most loyal and satisfied customers can change service providers due to reasons beyond their control. There is more switching behavior in telecom sector among different service providers. This behavior is present even when customers are within continuous relationships (Moreira, Silva, & Moutinho, 2016). Service providers face a lot of difficulties in retaining their customers. Therefore, in order to keep the customers satisfied and loyal, customers can be divided into two groups: customers who switched from another service provider and those who have never changed (i.e. “switchers” and first-time adopters or “stayers”) (Ganesh et al., 2000; Peng & Wang, 2006). Moreover, Ganesh et al. (2000) set out a step further and subdivide switchers into “dissatisfied switchers” and “satisfied switchers” (i.e. customers who have changed due to dissatisfaction and customers who have changed for other reasons than dissatisfaction).

Mittal and Katrichis (2000) highlighted the fact that customers need to be divided and by defining and categorizing groups of customers, service providers can come to know about the unique need of customers and assess customers on the basis of need they possess. By this service providers can change and manage the products according to customers unique need ensure the satisfaction of the clients. Different products are perceived differently by different customers. So, there is much need to investigate the loyalty status among the diverse groups of customers. In addition to that, Ganesh et al. (2000) has devised two constructs of loyalty in his empirical research: active loyalty and passive loyalty and investigated the impact on these two constructs on Stayers and switchers.

2.15.1 Studies on Stayers and Switchers in Non Telecommunication sector

Different studies are performed on customer groups with respect to stayers and switchers. For example, Ganesh et al. (2000) examined the differences between stayers, dissatisfied switchers, and satisfied switchers in terms of their overall satisfaction, commitment, and loyalty behavior and results confirmed significant differences among stayers and switchers in banking industry. Mittal and Katrichis (2000) investigated the importance of attitude and satisfaction among stayers and switchers (newly acquired customers) in the UK based multiple industries. While, Wangenheim and Bayon (2004) studied the differences between switchers, stayers and referral switchers in German energy sector. Results of the study revealed significant differences among the stayers and switchers.

Yang (2009) conducted a study in Taiwan banking sector to measure the differences in stayers and switchers perceptions towards antecedents of loyalty like trust, satisfaction and technology acceptance. Results of the study revealed significant differences in Stayers and switchers towards antecedents of loyalty: stayers and dissatisfied switchers revealed similar perceptions as compare of dissatisfied switchers. Whereas, based on the responses from 100 B2B fortune decision makers Williams et al. (2011) established a study in B2B Market perspectives. Results of the studies shows mixed findings about Stayers and Switchers towards various antecedents of loyalty like perceived service quality, price perception, and satisfaction and behavioral intentions. However, amongst all the antecedents price perception revealed significant differences between stayers and switchers.

Bhutto and Laghari (2012) developed a study in Pakistani insurance sector based on the data of selected insurance companies located in Sindh province. Data were collected from the corporate clients of leading insurance firms. Results of the study confirmed significant differences in satisfaction and loyalty status between stayers and switchers such as based on the results; switchers are more satisfied and loyal than stayers. Ibrahim and Najjar (2014) conducted a study to measure the link between psychological traits and loyalty towards sales person. The study set out significant differences between stayers and switchers about their perceptions about loyalty to sales persons and psychological traits. Moreover, another study was conducted in Indonesia where authors have examined the differences in perceptions among stayers and switchers towards relational bonds and perceived value (determinants of loyalty). Result of the study confirmed significant differences in perceptions of stayers and switchers towards the both antecedents of loyalty (Adiwijaya, 2014a).

Stein and Ramaseshan (2015) conducted a study to measure the differences in stayers and switchers perceptions about perceived service quality and perceived value as determinants of referral behaviors for internet service providers located in Australia. Cited authors have confirmed differences in stayers and switchers. Cited authors concluded that positive changes in service quality and perceived value appeal most to switchers than stayers. Whereas, in another study price sensitivity significantly affect the loyalty perceptions of stayers and switchers towards the health policies of insurance firms located in Australia (Keegan et al., 2016). In the similar vein, relational bonds and customer perceived value significantly influence the perceptions of stayers and switchers towards the satisfaction and loyalty of social media in China (Gu et al., 2016).

Table 2.12:

Summary of studies on Stayers and Switchers in non-telecommunication sector.

Source	Country	Industry	Variables
Ganesh et al. (2000)	USA	Banking	Customer satisfaction. Customer involvement. Customer loyalty.
Mittal and Katrichis (2000)	UK	Multiple Industries	Attitude. Satisfaction. Loyalty.
Wangenheim and Bayon (2004)	Germany	Energy	Customer Satisfaction. Customer loyalty.
Yang (2009)	China	Banking	Word of mouth. Trust Involvement Acceptance of technology Loyalty
Williams et al. (2011)	USA	B2B	Service performance Price perception Customer satisfaction. Behavioral intention
Bhutto and Laghari (2012)	Pakistan	Insurance	Price fairness. Satisfaction. Services. Loyalty.
Ibrahim and Najjar (2014)	Tunisia	Sportswear store	Need for affiliation. Need for variety. Word of mouth. Price sensitivity. Loyalty.
Adiwijaya (2014b)	Indonesia	Banking	Relational bonds. Utilitarian and hedonistic values. Loyalty.
Stein and Ramaseshan (2015)	Australia	ISP (internet service providers)	Service quality. Perceived value. Loyalty.
Keegan et al. (2016)	Ireland	Insurance	Customer demographics. Relationship length. Price sensitivity.
Gu et al. (2016)	China	Social networking	Relational bonds. Perceived values. Satisfaction. Loyalty.

2.15.2 Studies on Stayers and Switchers in Telecommunication Sector

Review of past studies revealed that stayers and switchers are different in their perceptions towards various antecedents of loyalty in telecom sector. In this regards, Hasan and Abdullah (2013) conducted a study in telecom sector of Bangladesh based on expectancy confirmatory theory. Cited authors needed to examine the determinants of customer satisfaction among stayers and switchers. Based on the Expectancy-confirmation model as analysis techniques, Results of study revealed significant differences in determinants of satisfaction among stayers and switchers. For switcher, price fairness was the most relevant predictor of satisfaction. While, stayers found to be influenced from value added services. In the similar vein, Shukla (2014) set out a study to measure the effect of income on stayers and switchers in the subscribers of five leading cellular company operating in India. Results showed significant differences in stayers and switchers on income basis. Lower prices attracted the switcher to switch in with the operator offering the lower prices while stayers were more concerned about value added services.

Pandey (2014) conducted a study in Indian telecom sector to examine the impact of demographic factor on purchasing behaviors of stayers and switchers. The results of the study confirm the significant impact of demographic factors on stayers and switchers. Moreira, Silva, and Moutinho (2016) investigate the impact of antecedents of loyalty like satisfaction, trust, service quality, switching costs, marketing communication on stayers and switchers. Their study has classified the stayers and switchers into three tiers i.e. stayers, switchers and heavy switchers in the telecom sector in Portugal. The data were analyzed through structural equation modeling (SEM) and revealed significant differences between stayers and switchers on various

antecedents of loyalty. For stayers, service quality and trust are more significant predictors of loyalty while switchers are more concerned about marketing communication. Whereas, switching costs was found to be the most significant predictor of customer loyalty for switchers then for stayers. In a nut shell, the extensive review of studies demonstrated significant differences among stayers and switchers, which highlighting the need to devise the strategies in accordance to the observed differences between customer profiles (switchers and Stayers).The table 2.13 summaries of the studies conducted in the telecommunication sector.

Table 2.13

Summary of studies on Stayers and switchers in Telecommunication sector.

Source	Constructs	Country	Contribution
Hasan and Abdullah (2013)	Customer satisfaction. Value added services. Service pricing.	Bangladesh	First study in telecom sector to investigate the subscribers from stayers and switcher perspective.
Shukla (2014)	Customer satisfaction Customer loyalty Income MNP	India	Pioneer study to Investigate the constructs of loyalty and satisfaction on Stayers and switcher. Main focus of study was to determine the differences in customer perception in customer satisfaction and loyalty from disposable income perspective
G.C. Pandey (2014)		India	Study has investigated the impact of demographics ,Particularly , Age on the usage behavior of Stayers and Switchers
Moreira, Silva, Moutinho, Brashear Alejandro, and Brashear Alejandro (2016)	Satisfaction, Service quality Switching Costs, Marketing Communication Trust	Portugal	This study has investigate the previously unexamined variables while adding an additional customer profile of Heavy Switchers

2.16 Summary

This chapter provides some insights on customer loyalty in the telecommunication sector. Furthermore, it has briefly discussed the underpinning theories like Oliver Four Stage Model and supporting theories like Expectancy Confirmation Model and Reciprocity theories. It addresses definitions and conceptualization of customer loyalty, perceived service quality, perceived price fairness, perceived justice in service recovery and relational bonds. Moreover, detailed literature reviews of past and contemporary studies along with the summaries were also included in this chapter.



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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This chapter provides a detailed description of the research framework along with the diagrammatical presentation of the framework to describe the linkages of study constructs. It also discusses the link between underpinnings and supporting theories anchoring the research framework and developing hypothesis. Moreover, meticulous descriptions about the research methodology and research process followed in this study have been addressed. This includes detailed descriptions about Research design, population of the study, sample size, sampling procedure, unit of analysis, measurement and scaling issues, data collection and analysis and the processes and results derived from the pilot study. Finally, an exhaustive description about the conduct the main study has been included.

3.2 Research Framework

Based on the literature review from several studies, this study has developed the following framework based on the Oliver's Four Stage Model, Expectancy Confirmation Model and Reciprocity Theory to investigate the mediating role of customer satisfaction and moderating role of corporate image on the relationship between PSQ,PF,JSR,RB and customer loyalty in Pakistan telecom Sector. The framework of this research is consisting of four independent variables that represent the main predictors of customer loyalty in the telecom sector, namely, PSQ, PF, JSR

and RB. While, customer loyalty is the dependent variable, customer satisfaction is mediating variable and corporate image is examined as the moderating variable.

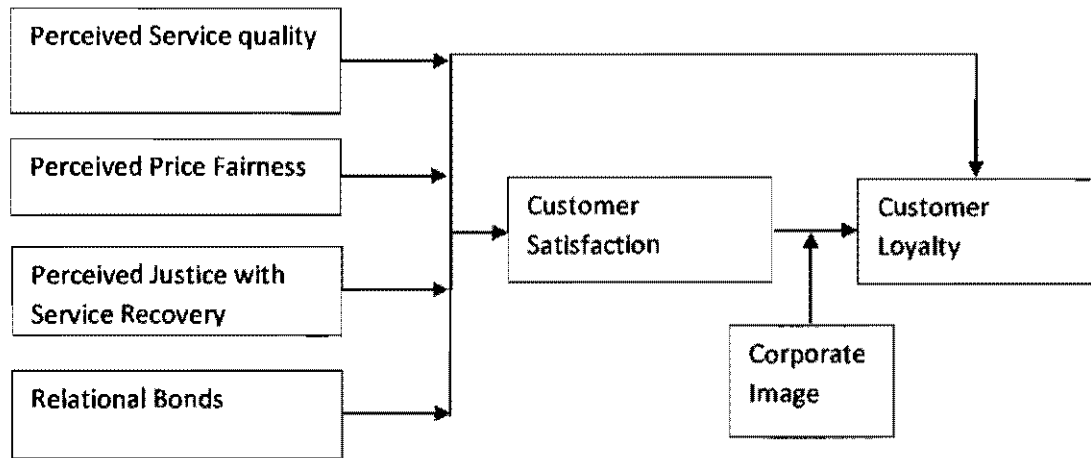


Figure 3.1. *Research Framework*

In figure 3.1, the research framework is demonstrating the direct impact of PSQ, PF, JSR and RB on customer loyalty. Next, The direct link of PSQ, PF, JSR and RB through mediating role of customer satisfaction on customer loyalty. Consequently , the influence of perceived service quality (Alireza et al., 2011; Chen & Cheng, 2012; Thakur & Singh, 2011), price fairness (Antón et al., 2007; Hassan et al., 2013; Nazari et al., 2014), Perceived justice with service recovery (Chang & Chang, 2010; Maxham & Netemeyer, 2002; Namkung & Jang, 2009; Siu et al., 2013), relational bond (Abubakar & Mokhtar, 2015a, 2015b; Gu et al., 2016; Ragel & Newton, 2017) on customer satisfaction and eventually on customer loyalty were revealed by past empirical studies. Finally, the moderating role of corporate image on the relationship between customer satisfaction and loyalty is revealed.

As stated earlier, the research framework of the current study is established by following the Oliver four stage loyalty model. According to Oliver (1999), strong

customer loyalty can be constructed through four sequential loyalty stages including ; cognitive, formative, conative and behavioral loyalty. At cognitive stage, customer gets inspired from the brand features like service quality , Prices, its packaging or labeling (Blut et al., 2007b; Oliver, 1999). Although loyalty will be not confirmed at this stage because of the initial nature of relationship but positive experiences at this stage will establish a strong foundations to move on to the other stages (Oliver, 1999). Importantly, Oliver (1999) proposed service quality or price perception as the most significant predictor of cognitive loyalty at the first stage. Consequently, positive experiences from cognitive stage persuade the customer to move on the second stage of loyalty and at this stage affective loyalty is established.

In affective stage, customer will establish emotional attachment with the brand which is derived from the positive experiences from the features like perceived service quality, price fairness, justice with service recovery and effective bonding strategies. Therefore, these emotional attachments will arouse the affection/loyalty through satisfaction at this stage. However, customer strong loyalty will still not be confirmed and customer can switch to others service providers on the basis of the observed differences in alternative brands. But, continuous delivery of perceived service quality, maintenance of price fairness, creation of perceived justice with service recovery and development of strong relationship with the subscribers through effective relational bonding strategies will restrict the customer switching intentions at this stage. After the formation of affective loyalty at second stage, the third stage of loyalty is characterized with the formation of conative loyalty which can be formed through the creation of commitment towards the service provider. In view of Oliver (1999), corporate image will shape a sense of commitment at the third stage.

Furthermore, Oliver (1999) opined that at this stage attitudinal loyalty is established which will be the output of all the experiences obtained by the customers from stated stages i.e. cognitive, formative and conative. Finally, customer will come into the last stage of loyalty i.e. action loyalty, which will be emerged because of the positive corporate image established in the previous stage of Conative loyalty. Comparatively, at this stage, customer will be engaged in continuous purchases and become the loyalty advocate of the service provider by recommending it to others. Therefore, customer will become behaviorally loyal with the service provider at this stage.

Apart from Oliver Four Stage Model, Expectancy Confirmation Model and Reciprocity Theory were incorporated as the supporting theories. Reciprocity Theory stress on those human behaviors that are shaped by their experiences or consequences. Therefore, according to this theory, positive experience brings positive behaviors and forms a sense of fairness in customer's mind while negative experiences urges the negative behaviors and resulted into unfair perceptions (Falk & Fischbacher, 2006). For that reason, we can assume that subscriber's relationships with the telecom operators are naturally reciprocals; if telecom operator satisfies the customers through their perceived service quality, faire prices, prompt justice with service recovery mechanisms as well as offering them the relational incentives in the forms of relational bonds then as a results, this kind behavior will urge a kind of outcome in the forms of development loyalty perceptions in subscriber's mind. On the contrary, if telecom operators are unable to satisfy the subscribers, this will form a sense of injustice in them. Therefore, as a negative response subscribers will be disloyal and can be switched to other telecom operator because of negative outcome reciprocally (Falk & Fischbacher, 2006; Fehr & Gächter, 2000; Kahneman et al., 1986). Indeed, the

main focus of this theory is how people judge or perceive the kind or unkind behaviors (Falk & Fischbacher, 2006).

In addition to that, few insights are taken from the Expectancy Confirmation Model. The basic rationale behind the selection of Expectancy Confirmation Model is the enclosure of customer satisfaction as the mediating variable between perceived service quality, price fairness, perceived justice with service recovery and relational bonds and customer loyalty. This scenario truly represents the underlying principles of ECM that when customer are satisfied from the telecom operators then this will emerged the loyalty (continue usage of service) with their telecom operators. On the contrary, if they are not satisfied with the services provided by the mobile operators then they will be disloyalty emerged (discontinuous of services) with the telecom operator. Finally, the theoretical model was also supported by taking insights from justice theory of service recovery. According to this theory, "When consumers who have suffered as a result of service failures, seek redress, they are seeking some type of perceived justice defined as the process in which "consumers weigh their inputs against their outputs when forming recovery evaluations." "Perceived justice consists of three components: distributive justice, procedural justice and interactional justice"(Hocutt, Chakraborty, & Mowen, 1997).Therefore, justice theory will incorporate the measures and the impact of justice with service recovery through the components of perceived justice and their direct and indirect impact on loyalty.

3.3 Research Hypothesis

The subsequent step of current research is the hypothesis development. Research hypothesis are the statements which are used to test the outcomes of the experiments or the research. According to Hair (2007b) hypothesis are used by the researchers to

examine whether the relationship between the variables is true or not. Therefore, based on the objectives of the study and the findings of the reviewed studies following hypothesis were developed. Hypotheses (H1-H4) were based on the first objective of this study, which was about the direct relationship between independent and dependent variables. The second objective of this study was to examine the relationship between independent variables and mediating variable. Therefore, four hypotheses were developed (H5-H8). In addition to that, two more hypotheses (H9 & H10) were developed to confirm the direct relationships between mediating variable and moderating variable with the dependent variable. Four hypotheses (H11-H14) were established on the basis of third objective which was to determine the mediating role on the relationship between the independent variables and dependent variable. Hence, a hypothesis (H15) was developed to comply with the fourth objective to examine the moderating role between mediating variable and dependent variable. Finally, Hypotheses (H16-H25) were established in response to the last objective of this study and that was to examine the differences in the perceptions between two customer groups (i.e. stayers & switchers) users about the direct relationship between independent variables and dependent variable.

3.3.1 Relationship between PSQ, PF, JSR, RB and customer loyalty

PSQ is the most prominent construct in marketing, more particularly in service marketing and customer relationship marketing literature have significant impacts on customer loyalty. Several studies have empirically established the significant positive relationship between PSQ and CL. Recently, Palamidovska-Sterjadovska and Ciunova-Shuleska (2017) reported a significant positive impact of PSQ on customer loyalty in the Macedonian telecom sector. In the similar vein, Al-Zoubi (2013) studied

the impact of PSQ on customer loyalty in Jordanian telecom sector and found significant positive relationship. Whereas, Hassan et al. (2013) also confirmed the significant positive association between both constructs among the prepaid mobile subscribers of selective universities located in Multan , Pakistan. Moreover this relationship were also confirmed from the findings of the subsequent studies conducted in the various telecom sectors like, Ghana (Nimako, 2012) , Nigeria (Oyeniye & Abiodun, 2011), Taiwan, (Liu et al., 2011), Malaysia (Mokhtar et al., 2011), Greece (Santouridis & Trivellas, 2010).

Several previous studies (Adjei & Denanyoh, 2014; Bassey, 2014; Haghighi, Dorosti, Rahnama, & Hoseinpour, 2012; Hashim, 2014) have examined the relationship between PF and customer loyalty in telecom sector. However, there is inconsistency found in the results of the previous studies. In some studies, the relationship between the PF and CL revealed positive significance. For example, Adjei and Denanyoh (2014) study verified the significant positive relationship between PF and CL in Ghanaian telecom sector. Moreover, significant positive relationship between PF and CL was also observed in subsequent studies conducted in Pakistani telecom sector (Awan & Iqbal, 2014; Hassan et al., 2013). In addition to that, Onlaor and Rotchanakitumnuai (2010) also confirmed a significant positive impact of price fairness on loyalty in the telecom sector of Thailand. While few studies revealed the insignificant relationship (Hashim, 2014; Nazari et al., 2014). However, it can be seen from the literature review on the relationship between PF and CL that in majority of the studies, PF positively and significantly affected the CL in the telecom and non-telecom sectors.

Since, service failures are unavoidable in nature but an equitable based service recovery will not only minimize the severity of the problems caused by the service failures but also serve as an predictor of customer loyalty. Moreover, perceived justice with service recovery has confirmed significant positive impact on loyalty and empirically verified through the various studies conducted in different telecom sectors like, Recently , Bahri-Ammari and Bilgihan (2017) has confirmed a significant positive relationship between perceived justice with service recovery and loyalty in the Tunisian telecom sector. In the similar vein, Simpe et al. (2015) verified significant positive relationship between perceived justice with service recovery and customer loyalty in Ghanaian telecom sector.

Review of past and contemporary researches revealed relational bonds as the most significant predictor of loyalty, and vital tool of long term relationship development. Indeed, due to the empirically and theoretically recognized significance of relational bonds as relationship development tools, considerable studies were established in the diverse sectors. However, the fewer number of empirical studies which tested the impact of RB on customer loyalty reported that RB significantly positively affects the loyalty in the telecom sector. For example, Ragel and Newton (2017) conducted a study to investigate the impact of relational bonds on Customer satisfaction and loyalty in Sri Lankan telecom sector. Data was collected from the 200 telecom subscribers through stratified random sampling. Results of the study confirmed significant direct and indirect effect of relational bonds on loyalty. Similarly, Nsour (2013) developed a study in the telecom sector of the kingdom of Saudi Arabia KSA. This study was based on analyzing the impact of relational bonds and customer

demographics on loyalty. Results of the study revealed the significant impact of relational bonds on loyalty.

Therefore, in lieu of the above empirically driven direct positive relationship between PSQ, PF, JSR & RB with CL, the following hypotheses are formulated to examine the association between these construct in Pakistani telecom sector.

H1- Perceived service quality has positive significant relationship with loyalty in telecom sector.

H2-Perceived price fairness has positive significant relationship with loyalty in telecom sector.

H3- Perceived justice with service recovery has significant positive relationship with loyalty in telecom sector.

H4- Relational bonds has significant positive relationship with loyalty in telecom sector.

3.3.2 Relationship between PSQ, PF, JSR, RB and Customer Satisfaction

Review of previous studies confirms that perceived service quality has significant influence on customer satisfaction. Consequently, this notation of significant positive relationship between perceived service quality and customer satisfaction were verified in various studies conducted in telecom sector. Rind et al. (2016) Found a significant positive impact of service quality on customer satisfaction in Pakistan. In the similar vein, Phaneendra et al. (2016) developed a study in the Indian telecom sector and the results of their study confirmed that among five dimensions, the only empathy and responsiveness were found in a significant positive relationship with customer satisfaction. In another study, Saha et al. (2016) found significant positive impact of

service quality dimensions (e.g., price, network quality, value added services and billing system) on customer satisfaction. Moreover, the similar significant positive relationship is also verified from the results of subsequent studies of telecom sectors (Arokiasamy & Abdullah, 2013; Asiedu & Sarfo, 2013).

Review of the past literature has confirmed the significant positive relationship between perceived price fairness and customer satisfaction (Bassey, 2014; Malc et al., 2016). Price fairness perception is amongst the most desirable criteria to judge the overall image of the service provider as well as serves as the main predictor of customer satisfaction (Rothenberger, 2015b). Moreover, the relationships between perceived price fairness and customer satisfaction have been empirically tested in the diverse studies conducted in the telecom sectors across the globe. Like, Rahman, Redwanuzzaman, Masud-Ul-Hasan, and Rahman (2014) confirm a significant positive relationship between price fairness and customer satisfaction. Whereas, Price fairness perception found a significant positive predictor of customer satisfaction in another study conducted in Pakistani telecom sector (Shahzad Khan, 2012). In the same way, price fairness established a significant positive influence on customer satisfaction in the study conducted in Tanzanian telecom sector by (Mlekwa, 2014). While, Estalami et al. (2007) conducted a study in the telecom sector of Spain and found significant positive relationship between price fairness and customer satisfaction.

This is a well-established fact that the customers are becoming well informed and more demanding and less forgiving. Therefore, service provider must make sure the availability of prompts services for their subscribers in order to ensure their satisfaction. Similar to other elements of service mix, perceived justice with service

recovery has set out significant predictor of customer satisfaction. This notation of significant relationship between perceived justice in service recovery and customer satisfaction have been confirmed in telecom sectors and dully verified from the empirical findings of various studies such as , Piaralal et al. (2015) established a study in Malaysian telecom sector and found a significant positive relationship between perceived justice in service recovery and customer satisfaction. Whereas, significant positive association of perceived justice in service recovery with customer satisfaction in the Ghanaian telecom sector has also been revealed by Simpe et al. (2015). Similar significant positive results between perceived justice with service recovery and customer satisfaction were established in the subsequent studies of telecom sectors (Ibrahim & Abdallahamed, 2014b; Vázquez-Casielles et al., 2010).

As of the various relational marketing tools, relational bonds are revealed as the most significant predictor of customer satisfaction and this relationship is dully verified by the past and contemporary studies. Recently, Abubakar and Mokhtar (2015a) have confirmed a significant positive impact of relational bonds on customer satisfaction. In the similar vein , relational bonds have established a significant positive impact on students' satisfaction in the selective Nigerian higher education institutions (Abubakar & Mokhtar, 2015b). In another study conducted in Indonesia, relational bonds confirmed significant impact positive impact on customer satisfaction (Adiwijaya, 2014b). Moreover, relational bonds have confirmed a significant positive impact on the customer satisfactions evident in another study conducted by Ragel and Newton (2017) in the Sri Lankan telecom sector.

Therefore, In lieu of the above empirically driven direct positive relationship between PSQ, PF, JSR & RB with CS, the following hypotheses are formulated to examine the association between these construct in Pakistani telecom sector.

H5- Perceived service quality has positive significant relationship with Customer Satisfaction in telecom sector.

H6- Perceived price fairness has significant positive relationship with Customer Satisfaction in telecom sector.

H7- Perceived justice with service recovery has significant positive relationship with Customer Satisfaction in telecom sector.

H8- Relational bonds have significant positive relationship with Customer Satisfaction in telecom sector.

3.3.3 Relationship between Customer Satisfaction and Loyalty

Several previous studies in telecom sector domain have examined the relationship between customer satisfaction and loyalty (Aksoy et al., 2013; Kim et al., 2016; Muhammad et al., 2016) . However, there is inconsistency found in the results ; some of the previous studies established a significant positive relationship with loyalty (Deng et al., 2010; Hossain & Suchy, 2013; Karunanithy & Rasanayagam, 2013a; Khan, 2012a; Oyeniyi & Abiodun, 2010; Santouridis & Trivellas, 2010). While, few studies explored the insignificant relationship between customer satisfaction and loyalty (Adoyo et al., 2012; Boohene & Agyapong, 2010; Muturi et al., 2013; Shrivastava & Israel, 2010). Nevertheless, it can be observed from the literature review in the chapter two that customer satisfaction has positively and significantly affected the loyalty in the telecom sector. Based on the above scenario, the following

hypothesis is developed to test the relationship between customer satisfaction and loyalty in Pakistan telecom sector.

H9: Customer Satisfaction has significant positive impact on loyalty in telecom sector.

3.3.4 Customer Satisfaction as a mediating variable to Customer's Loyalty

Since Perceived service quality, price fairness, perceived service recovery and relational bonds depend on the customer satisfaction. Therefore, if customer is satisfied, he will feel some sort of psychological or emotional attachment with the firm which will lead towards loyalty and retention. Similarly, customer satisfaction is heavily depended upon the quality of services, customer fairness perceptions about prices and service recovery and relational bonds. So, based on this reciprocal relationship, customer satisfaction will be treated as a mediating variable to loyalty.

Customer satisfaction has been found as significant moderators in the various studies like, Sarkindaji et al. (2015), in their investigation of students' retention in Nigerian institutes found that customer satisfaction partially mediates between the service quality dimensions and students retentions. Alireza et al. (2011), confirm a mediating role of customer satisfaction between service quality and loyalty in Iranian telecom sector. In another study conducted in India where customer satisfaction fully mediates between the service quality and customer's loyalty (Thakur & Singh, 2011). Furthermore, Chang and Chong (2011) revealed moderating role of Customer satisfaction with service quality and loyalty in Malaysian telecom sector. While, Akbar and Parvez (2009) found a fully mediation between service quality and customer loyalty in Bangladeshi telecom sector.

Based on the above scenario, following hypothesis is developed

H10: customer satisfaction mediates the relationship between service quality and customer loyalty in Pakistan telecom sector.

There are few studies which have justified the meditational relationship of Customer Satisfaction between perceived price fairness and customer's loyalty. Recently, Kaura et al. (2015) studied the impact of perceived price fairness on customer satisfaction and loyalty. Importantly, customer satisfaction significantly mediates into the relationship between perceived price fairness and customer loyalty. Rothenberger (2015a) found a fully mediation of customer satisfaction between price fairness and attitudinal loyalty. Adeleke and Suraju (2012), confirmed the significant relationship between price fairness, customer satisfaction and customer loyalty in Nigerian telecom sector. Whereas, Chong (2008) found a mediating role of customer satisfaction between price fairness and customer loyalty in Malaysian telecom sector. Similarly, Estalami et al. (2007) measured the impact of customer satisfaction directly and indirectly through price acceptance and price fairness and confirmed the significant impact from both perspectives. Moreover, Han and Ryu (2009) confirmed a fully mediation of customer satisfaction in the relationship between price fairness and customer loyalty in hotel industry. Likewise, Antón et al. (2007) found a mediating role of customer satisfaction. Based on the above scenario, following hypothesis is purposed.

H11: Customer Satisfaction mediates the relationship between perceived price fairness and customer loyalty in telecom sector.

Review from the past literature suggests service recovery a significant influence on Customer Satisfaction and loyalty. Akamavi, Mohamed, Pellmann, and Xu (2015) Investigate a significant impact of perceived service recovery justice on the Customer Satisfaction and loyalty of airline passenger. Awa et al. (2014) confirm a significant effect of service recovery on the mobile phone subscribers in a developed country. Similarly, Hsin Chang, Fu, Chen, Chiu, and Lu (2016) researched on service recovery satisfaction of mobile banking subscriber's repurchasing intentions. Results of the study revealed a significant impact of service recovery satisfaction on subscriber's future purchase intentions. Moreover, Abbas, Abullateef, Mokhtar (2015) found significant positive impact of service recovery on customer satisfaction and loyalty in the airline passengers of Malaysia.

Potluri (2010) investigated the impact of service recovery on the satisfaction of mobile subscribers in Ethiopian telecom sector which proved that customers were not satisfied with the service recovery mechanisms of the telecom operators in Ethiopia. Sabharwal, Soch, and Kaur (2010) found a significant positive relationship between service failure and recovery mechanisms on customer satisfaction and loyalty in the telecom sector. Boshoff (2005) measured the customer satisfaction of the mobile subscribers by using the RECVSAT scales and found a significant impact of service recovery on customer satisfaction. So, the above study provided a strong base for taking customer satisfactions a mediator between service recovery and loyalty in the telecom sector. Based on the above scenario, following hypothesis is purposed.

H12: customer satisfaction mediates the relationship between perceived justice in service recovery and customer loyalty in telecom sector.

There are few studies which demonstrate the mediating role of customer satisfaction on customer's loyalty. Recently, Abubakar and Mokhtar (2015b) investigated the impact of relational bonds on loyalty with the moderating effect of customer satisfaction(Student) in the Nigerian higher educational institutes. Results of the study revealed a fully mediation of customer satisfaction in the relationship between relational bonds and loyalty. Likewise, customer satisfaction fully mediates between the relationship of relational bonds and student satisfaction (Abubakar & Mokhtar, 2015a). Moreover, customer satisfaction found a partial mediation between the relationships of relational bonds and social site users loyalty (Gu et al., 2016). Based on the above scenario, following hypothesis is purposed:

H13: customer satisfaction mediates the relationship between relational bonds and customer loyalty in telecom sector.

3.3.5 Corporate Image as moderating variable between Customer Satisfaction and Loyalty

Review of the past and contemporary literature suggests corporate image another significant predictor of customer's loyalty. Telecom operators having good corporate image ensure the good corporate reputation and this positively affects the loyalty (Muturi et al., 2013). Firms are taking wide interest in philanthropic activities which in turn forms the good corporate image in the industry. The notations of positive relationship between corporate image and customer loyalty have been verified through various studies conducted in telecom sector including: Amin, Ahmad, and Hui (2012) confirmed a significant positive relationship between corporate image and loyalty in the Malaysian telecom sector.

Similarly, significant positive relationship was confirmed in another study established in the Nigerian telecom sector (Adeleke & Suraju, 2012). Whereas, significant positive association between corporate image and customer loyalty is resulted in the study conducted in the Ghanaian telecom sector (Boohene & Agyapong, 2010). Moreover, corporate image found a significant predictor of customer loyalty in the study conducted in the Bangladeshi telecom sector (Islam, 2010). Likewise, significant positive association between corporate image and customer loyalty have been observed in another study conducted in Pakistani telecom sector (Kim & Lee, 2010).

Telecom sector is operating in very volatile industry. All the operators are involved in hands on competition for the same market. In such situations, operators will be coping with lots of challenges in order to remain competitive in the industry. corporate image has been emerged as a value added source of obtaining the competitive advantages (Gouji et al., 2016). There was a time when organizational success was determined by the sales or the market share but now due to the emergence of ethical marketing practices and improvements in knowledge base elements like corporate image has been emerged as a source of competitive advantage.

Corporate image has affected the purchasing decisions in most of the times because customer perceives the value of products or service through the corporate image because customers perception is based on his psychological cues and customer perceives a good services from the firms having good corporate image in the market (Muturi et al., 2013). For example, in Asia, Chinese firms are considered as affordable service providers, hence this corporate image definitely affects the customers' perceptions while rating the Chinese firms in Asia. This is evident In Pakistan where

Zong telecom is a Chinese based telecom operator and its image in the market is set as cheapest service providers with pool of price conscious subscribers. Meanwhile, Mobilink is known as the pioneer telecom operator which introduced the GSM technology in Pakistan and until now, it is still enjoying the first mover advantage. In this light, customer prefers and feels more satisfied by subscribing the services of the firms with good corporate image. In addition, customer expects a quality of value added services like justifiable service recovery, financial rewards in terms of free minutes or promotional offers (Muturi et al., 2013). The review of the literature indicated that several studies have investigated corporate image as an independent variable (Giovanis et al., 2016; Jani, 2015; Rahman, 2012), as well as, mediating variable (Cheng & Rashid, 2013; Huang & Lien, 2012). there are also several studies that examined corporate image as a moderating variable for example (Jha et al., 2013; Nguyen & Leblanc, 2001). Therefore, these findings suggest that corporate image a significant predictor of loyalty. Hence, in lieu of the above empirically driven direct positive relationship between corporate image and customer's loyalty, the following hypotheses have been formulated to examine the link between these construct in Pakistani telecom sector.

H14: There is a significant positive relationship between corporate image and customer's loyalty.

H15: corporate image moderates the relationship between Customer Satisfaction and loyalty in telecom sector.

3.3.6 Differences in perception of loyalty determinants between stayers and switchers

It is encouraging to note the increasing awareness that all customers are not alike (Peppers & Rogers, 2016; Venter et al., 2015), little is recognized that how and why they differ (Heinonen & Strandvik, 2015). From the review of previous literature, it was confirmed that psychological state and behavior of one customer segment is totally diverse from the psychological state and behavior of the customers from other segments (Ganesh et al., 2000; Keaveney & Parthasarathy, 2001; Purwanto, 2013). If the company can rightly identify the behavioral and attitudinal differences among the diverse groups of customers, the service provider can easily utilize this information in customer acquisition and more particularly in devising the suitable loyalty strategies. Customers can be divided into two groups: customers who switch from another service provider and those who never change (i.e. "switchers" and first-time adopters or "stayers") (Ganesh et al., 2000; Moreira, Silva, & Moutinho, 2016; Peng & Wang, 2006). Moreover, the preview of last studies directs more focus on "switch from" firm rather than "switch to" firm (Moreira, Silva, & Moutinho, 2016). In the light of the importance of investigating the differences among the customer various segments, current study specifically focused on two customer segments i.e. stayer (who have never switched to any other service provider) and switchers (who have recently joined the service provider by switching from other service providers). Consequently, similar practice has been used by the previous researchers (Adiwijaya, 2014b; Bhutto & Laghari, 2012; Ganesh et al., 2000; Ho & Yang, 2009; Moreira, Silva, & Moutinho, 2016; Skogland, 2004; Wangenheim & Bayon, 2004).

According to Ganesh et al. (2000) not all customers should be targeted with retention programs and that even some of the most loyal and satisfied customers can change service providers due to reasons beyond their control (Fraering & Minor, 2013). There is more switching behavior in telecom sector among different service providers. This behavior is present even when customers are within continuous contract relationships. Service providers face a lot of difficulty in retaining their customers (Karjaluoto et al., 2012). In fact, basically a service provider categorized customers into two groups: customers who switched from another service provider and those who never changed (i.e. “switchers” and first-time adopters or “Stayers”)(Ganesh et al., 2000; Peng & Wang, 2006). Moreover, Ganesh et al. (2000) go a step further and subdivide switchers into “dissatisfied switchers” and “satisfied switchers” (i.e. customers who have changed due to dissatisfaction and customers who have changed for other reasons than dissatisfaction).

According to Mittal and Katrichis (2000) customers’ need to be divided by defining and categorizing groups of customers, service providers can come to know about the unique need of customers and assess customers on the basis of need, they may have. By this, service providers can change and manage the products according to customers’ unique need to ensure the satisfaction of the clients. Different Products are perceived differently by different customers. The present study, therefore, was required to inspect the differences by regarding the impact levels of loyalty, satisfaction, perceived service quality, perceived price fairness, perceived service recovery, and relational bonds that have been perceived in two groups of customers. These two groups of customers are stayers (those who have never switched service provider), switchers (i.e. customers who have switched from other service provider).

Based on the above scenario, following hypothesis are established to examine the direct relationship between the PSQ, PF , JSR , RB , CS & CI and customer loyalty in lieu of customer profiles (stayers & switchers)

H16: Perceived service quality and loyalty relationship are different between stayers and switchers.

H17: Perceived price fairness and loyalty relationship are different between stayers and switchers.

H18: Perceived justices in service recovery and loyalty relationship are different between stayers and switchers.

H19: Relational bonds and loyalty relationship are different between stayers and switchers.

H20: Customer satisfaction and loyalty relationship are different between stayers and switchers.

H21: Perceived service quality and customer satisfaction relationship are different between stayers and switchers.

H22: Perceived price fairness and customer satisfaction relationship are different between stayers and switchers.

H23: Perceived justice with service recovery and customer satisfaction relationship is different between stayers and switchers.

H24: Relational bonds and customer satisfaction relationship are different between stayers and switchers.

H25: Corporate image and loyalty are different between stayers and switchers.

3.4 Research Design

Research design is a plan that details how data can be collected and analyzed with a view to resolving the research questions of a given study. Therefore, quality of research depends upon the well constructed suitable research design which could be helpful in the determining the nature of data required for the research, data collection tools and suitable sampling procedures. Current study is based on the quantitative approach to investigate the structural relationship between seven constructs: PSQ, PF, JSR, RB, CS, CI and customer loyalty. Partial Least Square Path Modeling in conjunction with Smart PLS was employed to test the twenty five hypothesis that was built on Oliver Four Stage Model (Oliver, 1999), Reciprocity Theory (Gouldner, 1960), Expectancy Confirmation Model (Oliver, 1980) and Justice Theory (Adams, 1963). This study was consisting of survey method and cross-sectional data were collected once from the prepaid mobile subscribers from the four provincial capital cities of Pakistan. Moreover, data were collected from the business care centers through questionnaire consisting of suitable scales adapted from the previous studies.

Organizational researchers prefer using survey methods in those situation when population is very large and pieces of information are required about complex psychological and sociological variables that cannot be collected directly (Kerlinger, 1986) like, customer perceptions and attitudes (Druckman, 2005). Across different field of study, the variables were examined in a pure natural setting in consistent with correlation based inquiry (Blumberg, Cooper, & Schindler, 2014). In this regard, no attempt has been made to control any variable which is most common feature of experimental design. Meanwhile, statistical tools were applied for data analysis and interpretation and cross sectional research design was employed in this study, despite

the unified importance of longitudinal research design, this is in line with the goal of the study to validate the research model, considering the monetary and time constraints experienced by the researcher (Sekaran & Bougie, 2016).

3.5. Operationalization of Variables

Operational definitions validate the definitions (scales) or dimensions used in the study to help comprehend the underlying concept of the variables (Burns & Bush, 2004; Hair, Bush, & Ortinau, 2003). This study is based on the validated constructs which is helpful in operationalizing the definitions. Operational definitions of the variables are explained in the following sections.

3.5.1 Customer Loyalty

In this study, customer loyalty is operationalized as the “deeply held commitment to a brand, product or service that customers wish to patronize a brand or service continuously and repeatedly in future without considering the factors urging them for switching and spreading positive word of mouth as well as willingness to recommend others” (Oliver, 1999). Moreover, loyalty has been measured from four items adapted from (Hassan et al., 2013; Oliver, 1999) with five point likert scales ranging from 1 to 5 (strongly disagree to strongly agree). The detail of scales is presented in the following table 3.1

Table 3.1
Customer loyalty construct

Source	Adopted Items	Alpha
(Hassan et al., 2013; Oliver, 1999)	I believe that I can trust that my telecom service provider will not try to cheat me I intend to continue using this telecom operator in near future I will more likely to repurchase this telecom operator in near future. I will encourage friends and relative to use this telecom operator.	0.80

3.5.2 Customer Satisfaction

In current study, customer satisfaction has been operationalized in the terms of customer's overall evaluations pertaining to the quality of goods or service as well as the level of perceived experiences obtained from the consumption over time (Garbarino & Johnson, 1999). In order to measure the customer evaluations and experiences obtained from using the services of different mobile operator in Pakistan, five items were adapted from the study of (Lim, Widdows, & Park, 2006; Mokhtar et al., 2011). Each item was measured through five point likert scale ranging from "strongly agree" "1" to "strongly disagree" "5".

Table 3.2

<i>Customer satisfaction construct</i>		
Source	Adopted	Cronbach's Alpha
Lim et al. (2006)	I am satisfied with my decision to use mobile service from current operator	0.89
	My choice to use mobile service from this operator was a wise one	
	I think I did the right thing by using mobile service from this operator	
Mokhtar et al. (2011)	The mobile service provider has met my expectations	0.81
	Overall, I am satisfied with this mobile service provider	

3.5.3 Perceived Service Quality

Perceived service quality refers to the customer's overall impressions, judgments or feelings about the firm's services (Parasuraman et al., 1985). To achieve the optimum levels of service quality, performance of the services should match with the customer's overall expectations (Parasuraman et al., 1985). For the measurement of service quality extended SERVQUAL scale with the addition of two items; Value added services and Network coverage was utilized. Furthermore, service quality was

measured through 7 items , out of nine items 5 were adapted from Muturi et al. (2013) and items comprising of measurements of network quality, value added services were adapted from (Aydin, Özer, & Arasil, 2005). Finally, five point Likert scale was used for the measurement of perceived service quality, ranging from “strongly agree” “1” to “strongly disagree” “5”.

Table 3.3
Perceived service quality construct

Source	Adapted	Cronbach's Alpha
Muturi et al. (2013)	My current service provider has attractive offices and pleasant likeable staff My current service provider is reliable in providing services as promised My current service provider always shows willingness to help customers and provide prompt service My current service provider's staff inspires trust and confidence in me when I visit their offices My current mobile provider's staff provides me with caring and individualized attention whenever I visit their offices.	0.98
Aydin and Özer (2005)	My current service provider is providing excellent network coverage. My Current service provider is offering superior value added services like (GPRS, WAP etc.)	

3.5.4 Perceived Price Fairness

“Perceived price fairness refers to perceived differences in the prices as compare to the prices charged by the competitor in the same industry” (Xia et al., 2004). Perceived price fairness is more evident when the perceived differences among the prices are sound, inadequate or unjustifiable (Ting, 2013). For measuring the perceived price fairness, four items were adapted from Srikanjanarak et al. (2009).

Consequently, five point Likert scale was used for the measurement of price fairness. Ranging from “strongly agree” “1” to “strongly disagree” “5”.

Table 3.4

Price fairness construct

Source	Adapted /adopted	Cronbach Alpha
Srikanjanarak et al. (2009)	This operator offers the best possible price plan that meets my needs	0.87
	The price charged by this operator is reasonable and fair to me	
	This service provider has honest pricing structure (no hidden cost, getting full Talk time, etc.)	
	Overall, this operator provides superior pricing options compared to other service providers	

3.5.5 Perceived Justice with Service Recovery

Perceived justice with service recovery refers to “the customers’ equitable perception about the remedies or responses initiated by the service providers against the service failure” (Choi & Choi, 2014). For the measurement of perceived service recovery fairness 14 items were adapted from the study of Nikbin, Ismail , Marimuthu , & Armesh , (2012)Nikbin, Ismail, Marimuthu, and Armesh (2012). Moreover, Five point Likert scale was used for the measurement ranging from “strongly agree” “1” to “strongly disagree” “5”.

Table 3.5

Perceived Justice in service recovery construct

Source	Adopted	Cronbach,s Alpha
Nikbin, Ismail, Marimuthu, and Armesh (2012)	Distributive justice	0.89
	The final compensation I received from the telecom service provider was fair, given the time and hassle.	
	Although the event caused me problems, the effort to fix it resulted in a positive outcome for me.	
	The final compensation I received from the telecom service provider in response to the problem was more than fair Given the inconvenience caused by the problem, the compensation I received was adequate	

Table 3.5 (continue)

Source	Adopted	Cronbach's Alpha
	Procedural justice Despite the disturbance caused by the problem, the telecom service provider responded fairly and quickly. I feel the telecom service provider responded in timely fashion to my problem. I believe the telecom service provider has fair policies and practices to handle problems I believe the telecom service provider's complaint handling procedure was adequate The telecom service provider personnel showed enough authority and skills to solve my problem.	
	Interactional justice The telecom service provider employees seems to be very interested in my problem The telecom service provider employees exactly understood my problem The telecom service provider employees treated me in courteous and kind manners The telecom service provider employees did all they could to solve my problem Overall, the employees' behavior during service recovery was adequate	

3.5.6 Relational bonds

In the context of this study, relational bonds is defined as the psychological, emotional, economic and structural attachments between customer and service provider, act as an driving force towards binding the mutual relationship and accomplishment of common goals (Berry & Parasuraman, 2004; Smith, 1998). In other words, relational bonds refer to the relationship incentives provided to the customer for the long term relationship development. Relationship investments normally consist of financial bonds, social bonds and structural bonds (Wen-Hung et al., 2006). However, in the context of current study relational bonds were measured through economic bonds, social bonds, confidence bonds and emotional bonds and 16 items and adapted from the study of Lima and Fernandes (2015). Moreover, Past studies (Arantola, 2002; Hennig-Thurau, Gwinner, & Gremler, 2002b; Lima & Fernandes, 2015) were incorporated these scales to measure the relational bonds to

customer loyalty relationship. Moreover, five point Likert scale will be used for the measurement ranging from “strongly agree” “1” to “strongly disagree” “5”.

Table 3.6

Relational bonds construct

Source	Adapted/Adopted	Cronbach,s Alpha
Lima and Fernandes (2015)	Financial bonds	0.82
	Telecom service provider offers discounts to encourage customer future intentions	
	Telecom service provider provides discount for regular customers	
	Switching Cost bonds	
	Time and effort costs of changing to other provider are high for me	
	It would be inconvenient for me to change to another provider	
	Social bonds	
	I am recognized by certain employees	
	I have developed a friendship with the service provider	
	I am familiar with the employee(s) that perform(s) the service	
	I enjoy visiting this service provider	
	I am emotionally attached to my service provider	
	Emotional and confidence bonds	
	I know what to expect when I go in or contact my service provider	
	This operator's employees are perfectly honest and truthful	
	This operator's employees can be trusted completely	
	This operator's employees have high integrity	
	This operator's is concerned with my needs	
	The friendliness of the staff makes me feel good	
	In future, I will continue my relationship with this operator regardless of availability of the attractive alternatives	

3.5.7 Corporate image

Corporate image refers to the perceived goodwill of service provider in the customer's mind (Muturi et al., 2013). Corporate image plays significant role in the organizational equity development. Corporate image was measured through 6 items adapted from (Aydin & Özer, 2005; Muturi et al., 2013) . Moreover, five point Likert

scale were used for the measurement ranging from “strongly agree” “1” to “strongly disagree” “5”.

Table 3.7:
Corporate image construct

Source	Adapted/Adopted	Cronbach,s Alpha
(Aydin & Özer, 2005; Muturi et al., 2013)	<p>My service provider is stable and firmly established</p> <p>My service provider is innovative and forward-looking</p> <p>My service provider has a social contribution for society</p> <p>My service provider is a leading firm in the telecom sector</p> <p>My service provider has a strong prestige in the industry as compare to its competitor</p> <p>My service provider has a positive image</p>	0.87

3.5.8 Measurement of customer profiles (Stayers and Switchers)

In order to measures the differences between the levels of satisfaction and loyalty, customers were divided into two groups (stayers and switchers). Due to the heterogeneity of the customers groups, Those who switched from the other service provider was including into the population rather than the customers who were switched to other service providers along with the customers who were the continuous users of the current mobile operator. In order to classify the switchers and stayers' users, respondent were asked whether their current telecom operator is their first service provider (reported as stayers) or they have switched from other operator (reported as switchers). In this regard, this study used the similar approaches as precious researchers for profiling the customers (e.g., Ganesh et al., 2000; Moreira, Silva, & Moutinho, 2016; Wangenheim & Bayon, 2004). After receiving the responses for the first question, the respondents were placed into one of the two

groups, 1) those who said that their current telecom operator is their first service provider (stayers) and 2) those who switched from other operators (switchers) users.

3.6 Measurement Scales/ instrumentation

The current study has adapted the measurements from the previous studies relevant to the context of this study. The research model of this current study comprises of seven constructs: PSQ, PF, JSR, RB, customer satisfaction, corporate image and customer loyalty. Consequently, the Five-point Likert scale was adopted in this study. The likert scale was employed for psychometric responses in questionnaires to measure participants responses or degree of agreement with the given statements (Wakita, Ueshima, & Noguchi, 2012). Moreover, the Likert scales are non-comparable and uni-dimensional statements employed to measures the single psychological trait of respondents, most widely seen in five- point scales (Wakita et al., 2012). The respondent were asked to specify their responses based the 5 Likert scale which ranged from “strongly disagree” “1” to “strongly agree” “5”. The review of literature verified that over the last four decades, the five point- Likert scales was the most widely used in questionnaire’s development in all fields of social sciences particularly marketing, psychology and sociology (Barua, 2013; Edmondson, Edwards, & Boyer, 2012; Kim, Das, Chen, & Warren, 2009; Wakita et al., 2012). Moreover, according to an published content analysis of 251 articles published in journal of marketing using liker scale revealed that Likert scales were used as the data collection tool and empirically shown good results (Burns & Bush, 2004; Sekaran, 2006).

Table 3.8
Summary of constructs and items

Variable	Source	No. of items	Cronbach,s Alpha
Customer loyalty	Hassan et al. (2013)	04	0.80
Customer satisfaction	Lim et al. (2006)	05	0.89
Perceived service quality	Muturi et al. (2013), Aydin and Özer (2005)	07	0.98
Perceived price fairness	(Srikanjanarak et al., 2009)	04	0.84
Perceived Justice with service recovery	Nikbin, Ismail, Marimuthu, and Armesh (2012)	14	0.89
Relational bonds	Lima and Fernandes (2015)	16	0.82
Corporate image	Aydin and Özer (2005)	05	0.87

The table above has shown the variables along with the scales adapted from the previous studies. customer loyalty was measured through 4 items, customer satisfaction 5 items, perceived service quality 7 items; perceived price fairness 4 items; perceived justice with service recovery 14 items, relational bonds 16 and corporate image were measured from 5 items which were adapted from the previous studies.

The validity and reliability of the data and response rate mainly depend the design of the questionnaire and items, structure of the questionnaire and the rigor of the pilot study (Saunders, 2011). In this light, a questionnaires is one of the most widely used and well recognized data collection compared to other data collection methods due to advantages like ; straightforward formation of statistical results through lenience in coding, tabulations and rigor analysis (Dawson, 2007). Furthermore, respondents feel comfortable in recording their responses through questionnaires then participating in the interviews because of their prior familiarity in dealing with questionnaires. The

attachment of cover letter with the questionnaire ensures the confidence of the responses that encouraged the respondents to provide the sensitive information as compared to personal interviews.

Consequently, questionnaires are of two types i.e. close-ended and open-ended. The close ended questionnaire is composed of multiple check boxes for the respondents to complete. Whereas, open ended questionnaire is based on the open ended questions that requires the respondents to complete with their own standpoints (Fisher, 2007). Out of these two, close ended questionnaires are renowned as the most reliable and valid data collection tools. It assists the respondents to record their responses easily by filling out the desired boxes and helps the researchers in applying the statistical tools with the help of well in time coding and tabulations (Sekaran & Bougie, 2011). Therefore, based on the mentioned advantages and characteristics of respondents, current study employed close-ended questionnaires consisting of multiple choice questions. The questionnaire were personally administered as in line with the (Hassan et al., 2013) that the response rate through mailed questionnaire is very low in Pakistan.

3.7 Population of the Study

Population of study comprised of the people, events, some combinations, objects of interest that the researcher wants to investigate in order to draw the conclusion about certain phenomenon (Sekaran & Bougie, 2016). The population of this current study consists of prepaid telecom users of all the four telecom operators of Pakistan. There are several reasons for targeting the prepaid mobile subscribers as the target population of this study. First, this segment has the highest contribution in the revenue of Pakistani telecom sector (PTA, 2016). Pakistan Telecommunication Authority

(PTA, 2016) reported a significant growth in the prepaid subscribers as compare to postpaid mobile subscribers.

These substantial growths of prepaid users have justified the importance and growing influence of prepaid mobile subscribers in the Pakistani telecom sector. Furthermore, prepaid mobile subscribers can easily switch to other telecom operators because unlike of postpaid subscribers, they are free from any contract with the telecom operator or paying the bills, all they have to do is just to purchase a Sim card and recharge it through top up which is starting from just RS.20 or buying the scratch card (RS.100, RS.300 or RS.500). Moreover, switching behavior among prepaid subscribers is also well supported by the mobile network portability MNP facility which is not available to the postpaid users. Thus, it is very important to study the factors contributing towards the customer loyalty among prepaid subscribers. Prepaid mobile subscribers enjoy freedom from any type of contract or any termination fee or any other charges. They are capable of managing their own spending because of having no independencies. Moreover, life time of prepaid subscribers are longer than the postpaid subscribers; they can enjoy the services with a small amount of top- ups starting from RS 20 for more than a year, while postpaid services can be terminated any time in case of violation of contract or non-payment of bill. In addition to that, prepaid customer reveals less customer support services from the telecom operators. Above mentioned justifications are sufficient for selecting the prepaid mobile subscribers as the population for the current study. Moreover, PTA (2016) report has also figure out that prepaid customers consist of 130.576 million as compare to postpaid subscribers i.e. Just 2.66 million till 2016. This surely indicates that prepaid

segment contributes to the larger proportion of this industry along with gained a steady growth over the decades (referred to Table 3.9).

Table 3.9:
Growth of prepaid subscribers (2005-2016)

Year	Postpaid	Prepaid	Total Subscribers	% age of subscribers under prepaid segment
2005-06	95,004	3,297,996	3,393,000	97%
2006-07	104,216	6,151,784	6,316,000	97.2%
2007-08	220,125	8,584,875	8,805,000	97.4%
2008-09	94,340	9,339,660	9,434,000	97.5%
2009-10	158,704	9,760,296	9,919,000	98.4%
2010-11	17,422	1,071,478	10,889,000	98.4%
2011-12	19,224	1,182,276	1,215,000	98.6%
2012-13	2578673	126,354,989	128,933,662	98.0%
2013-14	2,239,596	137,735,158	139,974,754	98.9%
2014-15	1,834,535	112,823,899	114,658,434	98.9%
2015-16	1,458,216	131,783,249	133,241,465	98.9%

Source; (PTA, 2012, 2014, 2016)

The above table has highlighted the dominating position of the prepaid segment in the Pakistan telecom industry over the decades. This signifies that this segment is at the top priority for the telecom operators because of their contribution to the industrial revenue and being the largest segment of telecom subscribers. Moreover, majority of the prepaid subscribers belongs to different income groups and has significant differences among other demographical characteristics. In addition to that, switching of mobile operators is very common in this segment. So, this segment is also in line with all the objectives of current study particularly, comparison between stayers and switchers.

As mentioned earlier, prepaid mobile subscribers are dominating in telecom sector and this segment is operating in a hyper competitive environment where all the operators are offering multiple value added services in order to compete in this hyper competitive segment. The following table has illustrated the composition of prepaid telecom subscriber's operators as of September 2016.

Table 3.10

Composition of prepaid mobile subscriber's operator wise as of September 2016

Telecom Operator name	No. of prepaid subscribers	%age of prepaid subscribers
Mobilink	39792194	29.0%
Ufone	18591697	14.11%
Zong	25633462	19.50%
Telenor	37518858	28.50%
Warid	10187038	9.0%
Total	131783249	100%

Source: (PTA, 2016)

The above table represents the total percentage of prepaid mobile subscribers of all operators. As shown in the above table, Mobilink and Telenor are the major shareholders of prepaid subscribers but recently Warid is merged with the Mobilink. Therefore, Mobilink turn out to be the major player with 38% share. Followed by, Telenor with 28.50%, Zong 19.50% and Ufone, 14.5% respectively.

3.8 Sample Size

A sample is a unit or subset of a larger population selected for conducting a survey (Salant, Dillman, & Don, 1994). The right sample size becomes mandatory due the following reasons. First, it is almost impossible to study the entire population of the study. Second, right sample size maximized the likelihood of generalization of the fudges. Third, the optimal sample size reduces the likelihood of sampling errors. In

this regard, Salkind and Rainwater (2003) argued that sufficient sample size is mandatory for a good quality survey therefore, if the sample size is small, it might not represent the whole population and create type I sampling error: which refers to wrongly rejecting the true hypothesis or relationship. On contrary, a large sample size consign the type II error ; that is to accept the wrong hypothesis or relationship (Sekaran & Bougie, 2016). Therefore, proper suitable sample size is very imperative for the high-quality research.

Pakistan is comprised of four provinces which are Punjab, Sindh, Khyber Pakhtunkhwa and Baluchistan. Therefore, for the better generalizability of the results, data were collected from all the provinces of Pakistan and all the major cities in each province are included in the population of this study because these cities are the business and social hubs which could truly signify the population of their particular provinces considerably. Moreover, in order to find the more envoy population, data is to be collected from customer care centers of all the telecom operators located in the provincial capital of the entire provinces. Every telecom operators has their own customer care centers which are specifically developed for the assistance of subscribers and operating through the professionally hired staff. Unlike customer care centers, franchises can also be considered for the population frame but these are larger in numbers and majorities are run by the private investors. Therefore, by taking into consideration the nature of the scale and the research objectives, these franchises were least preferable choices for the consideration of sampling frame. The following table represents the break down of customer care centers of telecom operators in each province.

Table 3.11

Customer care centers of all telecom operators province wise

Province	Mobilink Customer care centers	Ufone Customer care centers	Zong Customer care centers	Telenor Customer care centers	Warid Customer care centers
Punjab	10	18	16	19	06
Sindh	07	06	04	07	03
KPK	01	02	03	02	01
Baluchistan	01	01	01	02	01
Total	19	27	24	30	11

Source: Abstracted from the official website of all the telecom operators.

Since, all the selected major cities are comprised of diverse groups of people, so drawing the appropriate sample size was very challenging. In this regard, Krejcie and Morgan (1970b) argue that if population of the study will exceed one million then 384 can be the truly delegate sample size. Therefore, in line with the statistics given in table 3.10, there are 131,783,249 prepaid mobile subscribers. However, review of previous studies reveal the poor response rate in the developing countries particularly, in Pakistani telecom sector (Chattha, Naqi, & Haroon, 2016; Muhammad et al., 2016; Nasir et al., 2014; Sabir, Irfan, Sarwar, Sarwar, & Akhtar, 2013). Therefore, keeping in view the stated scenario sample size was 40% increased i.e. in line with the implications of (Salkind & Rainwater, 2003) which gave a working sample size of 539.

Table 3.12

Determination of sample size of given population according to the rule of thumb (Krejcie & Morgan, 1970a)

N	S
15000	375
20000	377
30000	379
40000	380
50000	381
75000	382
100000	384

N= Population Size, S = sample size

Source (Sekaran, 2006)

3.9 Sampling method and data collection process

Stratified random sampling technique, particularly the proportionate stratified sampling has been employed in this study. . Proportionate sampling is a type of stratified sampling “where sample size is determined through proportionate stratifications, the sample size of each stratum is proportionate to the population size of the stratum. This means that each stratum has the same sampling fraction”. This sampling technique provide the likelihood of maximum representation of every member in each unit of strata in the population (Sekaran, 2006). As stated earlier, data were collected from the customer cares centers of all major cities in each province. In this regard, the computation of city wise proportionate sample size is shown in Table 3.13.

Table 3.13
City wise Proportionate sample size

City	Customer Care Center					Proportionate Sample Size					
	Mobilink	Zong	Telenor	Warid	Ufone	M	Z	T	W	U	Total
Lahore	3	2	5	1	2	48	35	57	8	17	165
Karachi	5	2	4	3	4	80	36	48	24	31	217
Peshawar	1	1	2	1	2	17	18	24	8	17	83
Quetta	1	1	2	1	1	17	18	24	8	8	74
Total	10	6	13	6	9	161	108	153	49	73	539

Source: Author

This computation has been done by dividing the number of subscribers of each telecom operator by the total population and multiplied by the sample size The table also presents the composition of city wise customer care centers of each telecom operators , along with the proportionate sample size for the each operator.. Consequently, Mobilinkhas 10 business care centers in the four major cities of Pakistan followed by Telenor 13, Zong 6, Warid 6 and Ufone with9 business care centers. Moreover, Mobilink has the most terms of prepaid mobile subscribers

followed by Telenor. These two operators have the larger proportion in the sample size compared to the other operators.

Gates and Solomon (1982) stated that the mall intercept technique is the most popular for marketing, advertising and consumer research surveys. The mall intercept technique offers two fundamental benefits in terms of cost and control (Aaker, 1990). According to Bush and Hair Jr (1985), the mall intercept is a unique technique, is relatively inexpensive and provides high quality and accurate data through personal administration (Bush & Hair Jr, 1985).

3.10 Data collection strategy

According to the census report released by Pakistan Bureau of Statistics (PBS, 2017) people will live in the capital of their state. Hence, four provincial capitals were selected for the survey. For this study, the researcher has worked with several research assistants to distribute the questionnaires in telecom operators' customer care centers in each city. The rationale behind the selection of customer care centers is that they are the company operated and provide the overall customer care services. Moreover, largest proportion of the prepaid subscribers visits these centers to file complaints and seek for help in all aspects of the telecom services.

The notification and consent letters were obtained from the Othman Yeop Abdullah Graduate School of Business (OYAGSB) which provides necessary information about the researcher, title of the research, name of supervisor and the statement about the insurance of information confidentiality. The letter provides a detailed explanation about the purpose of the study and has a statement that the respondents' confidential information will be kept safe (see Annexure A). The letter has helped a lot in data

collection from the respondents. The questionnaire has 4 pages including the cover page, UUM logo, along with contacts for more details personal consultancy. Right after the completion of pilot study on 5th March 2017, the data collection process for the current study was started from 11th March 2017 to 23rd August 2017.

The survey questionnaires were distributed with the help of trained enumerators in different customer service centres each city. The use of enumerators has been widely practice in studies related to consumer behavior (e.g., Kiria, 2011; Kumar, 2016; Kumar & Mokhtar, 2017). Ten enumerators were escorting the researchers with different composition in each city to collect data from the customer care centers. The research has selected postgraduate level students with prior data collection experiences to ensure strict compliance with sampling plan. Moreover, comprehensive training was given to each enumerator before deploying them for data collection. This training offered them to understand the following contents of the study followed by open discussion session i.e. what kind of survey it is; purpose of this survey; what is to be done; about the survey instrument; who are the respondents; location of survey; general guidelines to be explained to the respondents; the response options; sampling schedule; do's and don'ts.

In order to reach the diverse groups of population and to minimize the biasness, the researcher has observed the frequency of visits of the subscribers through continuous personal observations and personal investigations from the few visitors about their visiting status. It has been found that a majority of the clients visit the centre either before lunch break (11.00 AM to onwards until lunch break 01.0 PM to 2.30 PM) and at lunch break (03.0 PM to onwards till closing). Therefore, based on the mutual consultations, it was decided to collect the data during these two slots by following

the time sampling approach suggested by (Sudman & Blair, 1999). The researcher and his enumerators personally waited and handed over the questionnaire to every willing participant passing through the main entrance of each customer care center. Each day, questionnaires were distributed in at least one customer care center in a turn. Questionnaire of current study was well structured and put up with the simple language. Furthermore, no discrimination was made on the gender basis and the respondents were encouraged to take participation on voluntary basis. Proper time with personal assistance was provided by the researchers for the purpose of obtaining the right responses. Moreover, researchers encouraged the participants to handed over the responses at the spot and for those who could not submit their responses (majority were females, office workers, and few people were found in a hurry to drop their kids to home from school) provided a convenient time and place was arranged.

This current study has adopted survey questionnaires because of the following reasons. First, it is convenient, time-saving and provides accurate information (Sekaran, 2006). Second, no sensitive or technical questions were included in the questionnaires. Finally, questions were simple and easy to understand. The researcher had also translated all items into Urdu language to get best possible answers from the respondents (Urdu is the National language of Pakistan). The questionnaire was translated through department of English and linguistics, The Islamia university of Bahawalpur, Pakistan which translated the questionnaire into Urdu language, and then translated back to English language to ensure the accuracy of the meaning; this involved refining where necessary (Craig & Douglas, 2000).

3.11 Unit of analysis

The unit of analysis of the current study is the individual prepaid mobile subscribers belong to four provincial capital cities of Pakistan. Therefore, Data are collected from the subscriber on individual basis. Most importantly, selecting individual customer as a unit of analysis is very common practice in service marketing (Möller & Halinen, 2000). Accordingly, the most of the relational marketing and customer loyalty studies take individual customer as unit of analysis in different contexts such as in Banking (Adiwijaya, 2014b; Nadiri, 2016a; Petzer et al., 2017), Hotel (Hanaysha, 2016; Shakerian et al., 2017), Airline (Marina et al., 2016; Migacz et al., 2017; Nikbin et al., 2015), Retailing (Mohd Noor et al., 2015) & E-commerce (Jouali & Chakor, 2013). Moreover, in telecom sector, individual subscribers in particular are the most applicable unit of analysis (Adjei & Denanyoh, 2014; Ahmad, Hussain, & Rajput, 2015; Cheng, 2011; Cudjoe et al., 2015; Goyal et al., 2013; Izogo, 2016; Muturi et al., 2013; Shafei et al., 2016; Yeboah-Asiamah et al., 2016). In the light of above details, the current studies consider individual telecom subscribers as the unit of study.

3.12 Reliability and validity of the Measures

Pilot tests are generally integrated to check the final health of the questionnaire before the final data collection. These are primarily conducted to assess feasibility, time and cost involved in the survey as well as to predict the right sample size, and to improve the research design before initiating the final data collection process (Sekaran & Bougie, 2011). One of the major benefits of pilot study lies in its ability to highlight the shortcomings at initial stage that will help in final data collection (Sekaran & Bougie, 2011). More specifically, the major objectives of conducting a pilot study comprise of the determination of validity and reliability in items of questionnaire,

statements and wording of items, phrases and construction for securing the accurate findings.

The review of past studies contained that validity and reliability tests are used to ensure the goodness of measuring the adapted constructs and their items (Cavana, Delahaye, & Sekaran, 2001; Hair, 2010). Therefore, same tests were applied to make sure the validity and reliability issues in the data sets of the adapted items of this study. Reliability refers to the ability of the adapted item to produce the similar findings on different instances (Greener, 2008). As of the majority of the social sciences studies, the current study has employed the Cronbach alpha for the measurement of reliability in pilot study stage and discriminate analysis for the measurements of reliability in the main study.

The results of the pilot study are shown in Table 3. In order to ensure the reliability of the instruments, pilot test was conducted on 50 randomly selected prepaid mobile subscribers from the customer care centers in Multan region. The reliability score (Cronbach Alpha values) for each construct of the study were determined using SPSS version 23.14. Validity refers to the ability of the method, construct, or item to measure what is expected or suppose to be measured (Lancaster, 2005). It also refers to the extent to which the incorporated instrument, technique or process accurately measures the essential concepts (Hair, 2010; Sekaran & Bougie, 2011). Validity are of many types including, content validity, predictive validity, concurrent validity, construct validity, face validity, internal and external validity, criterion validity and statistical validity (VanderStoep & Johnson, 2008). However, contemporary researchers like Greener and Martelli (2015) argued that constructs validity is most important for the measurement of most important aspects of data analysis.

As face validity test was conducted ensure the item looks like it can measure the intended construct. Moreover, construct validity was determined to ensure that items are able to measure the construct as they were operationalized for measurement to determine whether the results derived from adapted items are truly representing the underlying theories used in this study. Consequently, convergent validity and discriminate validity were taken into account d in this study to determine the construct validity (Hair Jr, Hult, Ringle, & Sarstedt, 2016; VanderStoep & Johnson, 2008).

Table 3.14
Pilot study's Reliability Results

S/NO	Constructs	No of Items	Cronbach's Alpha
1	Perceived service quality	7	0.81
2	Price Fairness	4	0.79
3	Perceived Justice With Service Recovery	14	0.81
4	Relational Bonds	16	0.79
5	Customer Satisfaction	5	0.84
6	Corporate Image	6	0.81
7	Customer Loyalty	4	0.85

Source: Author

As suggested by Sekaran and Bougie (2016), The Cronbach's Alpha value of 0.70 and above is acceptable. As shown from the above table Cronbach's Alpha values from all the constructs are fulfilling the recommended standard value of 0.70 which confirms the reliability all the constructs.

3.13 Data analysis Strategy

Data analysis method or strategy refers to the procedure and statistical tools employed by the researcher to analyze the data, to test research hypotheses and subsequently to refine theories. The present study has employed the descriptive and

inferential statistics tools for data analysis. Descriptive statistics were performed through the SPSS software version 23. This process requires explaining the initial general understanding about the profiling, demography etc., summarizing of data and generations of various forms of tabular presentations, and it also used to describe the data by showing the frequency of the occurrence of various outcomes (Cronk, 2017). Moreover, by employing the descriptive statistics, various issues such as, the center of data, the variability of the data set, were presented and discussed to ensure more understanding of the issues.

On the other hand, Fornell and Larcker (1987) argued that there are two generation of analytical techniques employed in inferential statistical to predict and forecast the dependent variable from the data. Earlier generation techniques comprise of regression models such as Logit, Manova, Anova, and Linear Regression that allow researchers to perform analysis for only a single layer between underlying research variables at a time. On the contrary, the second generation of analysis techniques like, Structural Equation Modeling (SEM) supported in performing high quality statistical analysis. Therefore, current study has employed the Partial Least Squares Structural Equation Modeling (PLS-SEM) for the data analysis.

First, all the usable questionnaires were coded into the statistical package for social sciences (SPSS, V.23) right after the collection of raw data from the field. Then, the data using the appropriate data analysis techniques. These includes, data screening was performed to detect the missing values and manage to them through respective mean values. Then, descriptive statistics were performed to describe and compare the demographics (Saunders, 2011). And lastly, PLS-SEM approach was adopted for the entire data analysis. PLS-SEM turn out to be the most evident research techniques for

the cause and effect relationship among the latent constructs (Hair, Ringle, & Sarstedt, 2011). This enables researchers to answer multiple research questions in a single and comprehensive analysis by modeling the relationship between the constructs at the same time (Bagozzi & Yi, 2012; Fornell & Larcker, 1987; Kline, 2015). Moreover, PLS-SEM is a strong, flexible and more sophisticated tool for the model assessment as well as for predicting and testing the theory (Lowry & Gaskin, 2014; Ringle, Wende, & Becker, 2014). Moreover, Afthanorhan (2013) argue that PLS-SEM has the ability to obtain the most accurate score for the Confirmatory Factor Analysis (CFA) test.

PLS-SEM is one of the most widely used statistical analysis technique across various fields of social sciences such as Marketing (Hair, Sarstedt, Ringle, & Mena, 2012; Henseler, Ringle, & Sinkovics, 2009; Reinartz, Krafft, & Hoyer, 2004), Business Research (Hair Jr, Hult, Ringle, & Sarstedt, 2014), Human Resource Management (Becker, Klein, & Wetzels, 2012), Management Information Systems (Chin, Marcolin, & Newsted, 2003; Marcoulides, Chin, & Saunders, 2009), Family Businesses (Sarstedt, Ringle, Smith, Reams, & Hair, 2014), Operations Management (Peng & Lai, 2012), and Strategic Management (Gudergan, Devinney, Richter, & Ellis, 2012; Hulland, 1999; Lew & Sinkovics, 2013). This is due to its capability to appraise the latent variables and their relationship with the items (outer model) and testing the relationship with the latent variables (inner model) (Hair et al., 2012; Reinartz, Haenlein, & Henseler, 2009). Addiotnaly, Henseler et al. (2009) argue that PLS-SEM is more productive in handling of non-normal or abnormal data because of its flexible assumptions about normality distributions of the variables. In particular, PLS-SEM estimates paths under conditions of normality with large sample sizes and

is more likely to detect variances among groups than the covariance-based SEM approach (Marcoulides et al., 2009).

Meanwhile, under non-normality conditions and smaller samples, the PLS-SEM method seems to be more preferable. In this regard, even in the moderately non-normal data, large sample size is needed even though the approach is less sensitive to sample and normal distribution (Marcoulides & Saunders, 2006). PLS-SEM addresses the problem of statistical power within analysis in similar conditions of data than covariance based SEM (Haenlein & Kaplan, 2011; Reinartz et al., 2009). On the other hand, Sarstedt, Ringle, and Hair (2014) argue that PLS-SEM offers some benefits like handling the all types of data, prediction of abnormality of data and its ability to investigate the relationship between the constructs at the same time. It was further stressed that the above functions should be recognize as the benefits rather than the assumptions of PLS-SEM.

PLS-SEM is one of the superior models that perform estimations better than first generation and other co-variance based regressions models for assessing mediation and moderation. Thus, based on the arguments for choosing a suitable technique to estimate structural equation models, PLS-SEM was adopted for this study due to the complexity of the research model. Moreover, ((Haenlein & Kaplan, 2011; Hair et al., 2012) argue that PLS-SEM is more suitable in the situations when larger number of exogenous variables are tested with small number of endogenous variables. In addition, PLS-SEM as a multivariate analysis method can be applied in fields like Marketing, Human Resource Management, Strategic Management and other fields of social sciences disciplines.

Compared to other covariance based techniques, PLS-SEM has no restrictions in terms of the interaction technique used in moderation test. Therefore, it is a reasonable alternative for testing moderation effect (Chin et al., 2003; Vinzi, Trinchera, & Amato, 2010). Lastly, PLS-SEM allows for complex models that includes chains of effects, such as mediation and other more complex relationships (Lowry & Gaskin, 2014). Therefore, this study has employed SmartPLS v3.0 (Ringle, Wende, & Becker, 2015) to determine the outer model (reliability, convergent validity and discriminate validity) and inner model (significance of the path coefficients, coefficient determination, the effect size and predictive relevance).

3.14 Chapter Summary

This chapter has described the relationship between the variables of the study in the theoretical framework, hypothesis development and operationalization of the variables. It has also explained the composition of research design through cross-sectional data about the prepaid user collected from the call centers of four major cities of Pakistan namely, Lahore, Karachi, Peshawar and Quetta. This Chapter has also discussed the sampling methods, procedures and measurement issues. Furthermore, PLS-SEM as a method for data analysis using SPSS v.18 and SmartPLS to conduct preliminary data analysis, descriptive statistics, measurement model (reliability and validity tests), and structural model evaluation have been briefly explained. Finally, the chapter has presented and discussed results of the pilot study.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter discusses the data analysis and findings of the study in the various sections. Different sets of statistical analyses were performed on the collected data. The statistical analysis started with the overview of the collected data such as; response rate, test for non-biased, independent t-test, common method biased, data screening and preliminary analysis through missing values, assessment and removal of outliers. Then, the analysis has detailed about the demographic profiles and descriptive analysis of latent variables. The chapter also highlights the findings of measurement model through construct validity and reliability analysis by following the PLS-SEM approach. Moreover, structural relationship between four exogenous constructs i.e. perceived service quality, perceived price fairness, perceived justice in service recovery and relational bonds and the two endogenous constructs of customer satisfaction and customer loyalty are reported.

4.2 Response rate

In compliance with the developed criteria of data collection, questionnaires were distributed among 539 respondents in the customer care centers of all the telecom operators in four major provisional capital cities of Pakistan. Out of 539, only 422 questionnaires were received from the respondents while maintaining a composite response rate of 78%. In order to maintain the quality in responses, (Henseler & Fassott, 2010) argued that missing values must be organized and up to 50 percent

incomplete questionnaires must be eliminated from the sample size. As per table 4.1, out of 422 responses, 396 were selected for the final data analysis.

Specifically, total 33 responses were discarded due to the reasons like, 27 responses were eliminated because of incomplete responses due to a lot of missing value issues. While, 6 responses were declined because of the multivariate outlier's detection issues. These responses were declined from the reposes because of lack of non-representation of the population (Hair, 2010). Consequently, the final sample size of this study is based on 396 responses, which constitutes a valid response rate of 73% obtained from prepaid mobile subscribers of all the telecom operators. This response rate is sufficient for the better generalizability of the results as this phenomenon is well supported by the fact that 5-10 times responses to number of variables in a given study are sufficient for a good data analysis (Barlett, Kotrlik, & Higgins, 2001; Hair, Black, & Babin, 2010).

Table 4.1

Response rate of the questionnaire

Response	Frequency / ratio
Number of questionnaires distributed	539
Number of returned questioners	422
Usable questionnaires	396
Excluded questionnaires	33
Questionnaires not returned	117
Response rate	78 %
Valid response rate	73%

4.3 Test for non-response bias

Non-response bias refers to the difference in the feedback of respondents and non-respondents (Lambert & Harrington, 1990). Consequently, Armstrong and Overton (1977) preferred Time trend extrapolation system to assess the possibility of non-response bias, which refers to compare the early and late responses (i.e. non-respondents). Furthermore, authors maintained that late respondents will likely to have the same characteristics of non-respondents. Meanwhile, Lindner and Wingenbach (2002) suggested a minimum 50 percent response rate to lessen the chances of non-response biasness. While, By following the principles of Armstrong and Overton (1977), the respondents of current study have divided into two groups; group one referred to the respondents who responded to the survey before 30th May, 2017 (early respondents) and group second comprising of respondents who responded on 30th May, 2017 and after (late respondent).

Consequently, below table 4.2 demonstrate the applications of independent-t- test for the detection of any possible non-response bias from the variables of the study namely, perceived service quality, perceived price fairness, perceived justice in service recovery, relational bonds, customer satisfaction, corporate image and customer loyalty. Finally, Levine's test was employed to measure the difference in responses of early and late respondents. To do so, two-tailed equality of means was employed to obtain the p-value associated with the hypothesis. Moreover, threshold value for Levene's test for equality of variance must be 0.50 or more (Field, 2009; Pallant, 2013).

Table 4.2

*Levene's Test for Equality of variances***Levene's Test for Equality of variances**

Varia Groups		N	Mean	Std.	Std. Error	F	Sig
bles				Deviation	Mean		
PF	Early Response	320	3.71	.66	.037	.13	.73
	Late Response	76	3.69	.68	.068		
CS	Early Response	320	3.81	.67	.04	.17	.67
	Late Response	76	3.71	.70	.08	.76	.38
CI	Early Response	320	3.97	.62	.04	.09	.73
	Late Response	76	3.91	.07	.08		
CL	Early Response	320	3.89	.67	.04	1.01	.32
	Late Response	76	3.93	.63	.07		
PSQ	Early Response	320	3.80	.59	.03	0.89	.34
	Late Response	76	3.65	.62	.07		
DJ	Early Response	320	3.53	.74	.04	0.08	.06
	Late Response	76	3.22	.77	.08		
PJ	Early Response	320	3.70	.64	.07	0.16	.17
	Late Response	76	3.58	.63	.07		
IJ	Early Response	320	3.83	.70	.04	1.96	.16
	Late Response	76	3.63	.82	.09		
FB	Early Response	320	3.54	.69	.05	0.68	.41
	Late Response	76	3.00	1.06	.12		
CSB	Early Response	320	3.61	.88	.05	0.20	.65
	Late Response	76	3.36	.93	.11		
SB	Early Response	320	3.67	.75	.04	0.19	.66
	Late Response	76	3.57	.78	.08		
CB	Early Response	320	3.83	.63	.04	0.27	.61
	Late Response	76	3.73	.64	.07		

Independent sample Tests

Table 4.3 demonstrated the results of independent-samples t-test values. Indeed, the results confirm that the equal variance significance values for each of the seven constructs are above the 0.05. Therefore, the assumption of equality of variance between early and late responses has not been violated. Moreover, this study has managed 73 percent valid response rate which is higher than the suggested minimum response rate i.e. 50 percent by Lindner and Wingenbach (2002) for the absence of non-response biasness. So, based on the above characteristic, this study is free from all the non-response bias and capable of producing the generalized findings.

4.4 Common method bias

Review of past statistical literature have revealed common methods bias as one of the major component that inflating the chances of occurrence of errors which substantially affect the structural relationship observed variables that exist among measured variables (Nunnally & Bernstein, 1994). In this regard, Podsakoff, MacKenzie, Lee, and Podsakoff (2003) opined that common method biased refers to variance that is invariably attributable to the measurement procedure rather than to the actual constructs the measures represent. Incidence of common bias is quite common in social science researches principally in behavioral sciences. Therefore, in order to curtail the negative effects of common bias errors, contemporary researchers are devoting considerable attention to the sources of common bias error eliminations. Consequently, In order to eliminate the CMB, current study has pursue measures like elimination of ambiguity in wordings of the indicators of questionnaire and making them simple so that respondent can easily recognizes them and ensured the confidently of responses acquired from the respondents (Podsakoff & Organ, 1986).

In addition to that, current study has adopted the Harman's single factor test by following the recommendations of Harman (1967) to evaluate the common biased variance. The major assumption of Podsakoff and Organ (1986) single factor is that if there will be sufficient numbers of covariance exists in the data, then either a single factor may emerge or one major factor will more likely affect the covariance in the predictor and criterion variables (Podsakoff & Organ, 1986). As per the suggestions of Podsakoff and Organ (1986), Component factor analysis was performed for the identifications of CMB. The outcome of this analysis has produced first predictors having 24.375 variations that are far below the acceptable range of below 50 percent. Yet, results validate that not a single value is found responsible for the majority of the covariance in the predictor and criterion variables (MacKenzie & Podsakoff, 2012). Therefore, the results suggesting that common bias method is not an significant issue and is not likely to inflate the relationship between predictors and criterion variables of the current study.

4.5 Data Screening and Preliminary Analysis.

Data screening at the early stage is very important in multivariate analysis. It will help the researchers to identify any possible variations in the data or ignorance of any assumptions of performing multivariate analysis (Hair, 2007b). Moreover, it will assist researchers to obtain a through insight about the nature of data for the further proceedings. Consequently, all the usable samples of 396 were dully coded and entered into SPSS version 23 just before performing the initial data screening and preliminary analysis. After that, following initial data and preliminary analysis tests were performed just after the data entry and coding into SPSS software: (1) Missing

value analysis, (2) Outlier assessment (Hair, Black, et al., 2010; Tabachnick, Fidell, & Osterlind, 2001).

4.5.1 Missing values

To begin with, it is imperative to remove the missing values for performing the diagnostic test in SPSS. Missing value or missing data refers to the presence of any observation which is characterized by absence of response or having incomplete information (Hair, 2010), which is normal in performing multivariate data analysis. Researcher has initially verified the missing values from the questionnaire right after receiving them from the respondents and this approach has helped in dropping the missing values from the data at preliminary phase. Despite of this, total 102 missing values were deducted out of 26,532 data points, after running the descriptive statistics in SPSS (which is calculated as dividing the total no.of missing values with the total data points multiplied by hundred), which is accounting for 0.38 percent. Specifically, service quality recorded 9 missing values; price fairness 14, perceived justice in service recovery 10, relational bonds 15, customer satisfaction 15, corporate image 17 and customer loyalty detailed 22 missing values. However, none of the missing values were found in demographic portion. Generally, researchers argued that existence of 5% or more missing values in the data are treated as non-significant (Hair, 2010; Hair Jr et al., 2014; Tabachnick, Fidell, & Osterlind, 2007). Therefore, the missing value of 0.38 percent is established as non-significant. Moreover, majority of researchers argued that mean substitution methods is more suitable for the treatment of the missing values provided that these must be 5% or less than 5% (Hair Jr et al., 2014; Little & Rubin, 2014; Raymond, 1986; Tabachnick et al., 2007).

4.5.2 Assessment and removal of outliers

Assessment of outlier is also considered as the most vital stage of data screening and preparation process for the data analysis (Aguinis, Gottfredson, & Joo, 2013; Montgomery, Peck, & Vining, 2012). Outlier refers to a point where specific observation exceeds from other observations. Most importantly, outliers denote the experiment errors causing because of variations in the measurements (Churchill & Iacobucci, 2006). Moreover, Barnett and Lewis (1994) Defined outliers as a values or set of values that appeared inconsistent with rest of the data. Besides, It can also be defined as the observations or set of observations that lies at unusual distance from other values of the given data set. Outliers disrupted the findings of research more specifically in regression based research by distorting the significant differences among the estimates of regression coefficients in a given data set (Verardi & Croux, 2008). Moreover, Hair, Black, et al. (2010) argued that examination of outlier is very critical because existence of outliers will distort the further statistical test. To ascertain the values which were outside the acceptable data range, Mahanalobis distances (D^2) was employed to detect the multivariate outliers using liner regression method in SPSS v23, followed by computation of chi-square value (Tabachnick et al., 2007). Consequently, with six predictor and degree of freedom 6 at chi-square table with $p < .001$, outlier criteria of 22.46 was obtained (Tabachnick & Fidell, 2013) this means that Mahanalobis D^2 value is 22.46 and any value above this is treated as outliers and it should be removed. Therefore, by following this process, only six outliers were deducted and excluded from the analysis which resulted into a final data of 396 usable responses for the further analysis.

4.6 Demographic profile

Following table 4.3 demonstrate the details about the demographic profiles of the respondents of current study. The demographic profile of the current sample of the study includes gender, income, occupation, city, status of subscriber, previous telecom operator, current telecom operator, duration of relationship with current telecom operator, duration of relationship with previous telecom operator which were measured on nominal and ordinal scales.

Table 4.3
Demographic Profile

Demographic variable	Frequency	Percentage
Gender		
Male	259	65.4
Female	137	34.6
City		
Lahore	114	28.8
Karachi	160	40.4
Peshawar	54	13.6
Quetta	68	17.2
Age		
Below 20	32	8.1
21-35	236	59
36-50	115	29
50 & above	09	0.02
Occupations		
Govt. employee	63	15.9
Self-employed	83	21
Students	109	27.5
Professionals	85	21.5
Others	56	14.1
Education		
Primary	15	3.80
Secondary	58	14.60
Undergraduate	110	27.80
Masters	146	38.90
MS/M.Phil.	56	16.40
PhD	2	0.50
Income		
Below 10,000	88	22.2
10,000-25,000	95	24.0
25,000-50,000	113	28.5
Above 50,000	96	24.2

Table 4.3 (Continue)

Demographic variable	Frequency	Percentage
Status		
Stayer (yes this operator is my first operator)	170	42.90
Switcher (No, I switched from other operator)	226	57.10
Previous telecom operator		
Mobilink	133	33.6
Telenor	78	19.7
Ufone	73	18.4
Zong	66	16.7
Warid	46	11.6
Current telecom operator		
Mobilink	137	34.59
Telenor	85	21.46
Ufone	108	27.27
Zong	53	13.38
Warid	15	3.78
Duration of relationship with previous telecom operator		
Less than 6 month	49	12.1
6 months-1 year	72	17.9
1 year-----3 years	112	28.3
Above 3 years	163	41.3
Duration of relationship with current telecom operator		
Less than 6 month	46	11.4
6 months-1 year	79	19.7
1 year-----3 years	94	23.7
Above 3 years	177	44.7

As shown in the table 4.4, majority of the respondents fall into the age group of 21-35 years old age which consisted of 59% followed by 29% from 36-50 years old groups, remaining 8.1% from age 20 or above and only 0.02% respondents were from the age groups of 50 years or above. The demographic profile of the respondents demonstrated that 259 respondents, 65.4% were male and 137 female i.e. 34.2% respondents were female respondents. Moreover, Majority of the respondents i.e. 40.4% were from Karachi followed by 28.8% Lahore, 17.2% Quetta and 13.6% respondents were from Peshawar cities. Consequently, majority of the respondents were students, 27.50% while 21.50% were professionals followed by 21% self employed, 15.9% govt. employees and rest of 14.10% respondents were belongs to

others statuses like house wife, retired employees, she-males etc. 38.90% respondents were holding masters degree while 27.80% undergraduates, 16.40% MS/M.Phill while 14.60% Secondary level degree holders followed by 3.80% primary and only 0.50% respondents hold PhD degrees.

Furthermore, 28.50% respondents were belonged to 25,000-50,000 income group, while 24.2% above 50,000 income group, followed by 24% fall 10,000-25,000 and 22.20% respondents were belonging to below-10,000 income groups. 57.10 respondents were stayers and remaining 42.90 were revealed as switchers. Additionally, 33.60% respondents were the Ex-users of Mobbilink, whilst, 19.7% Telenore, 18.4% Ufone, followed by 16.7% Zong and only 11.60% respondents were identified the users who have switched from the Warid telecommunications. Meanwhile, majority of the responds were found to be the subscribers of Mobilink i.e. 34.59% and 27.27% Ufone, while 21.46% Telenore followed by 13.38% Zong and only 3.78% respondents were recognized as the Warid Telecom subscribers. Besides, majority of the respondents i.e. 41.3% left their respective operators despite of having above 3 years of subscriptions, followed by 28.3% with 1-3 years of relationship followed by 17.9% 6 Month-1year and 12.1% had less than 6 month duration of relationship with the previous service providers. Finally, majority of the respondents were found to have more than 3 years of relationship with the current telecom operator i.e. 44.7%, While, 23.7 hold 1-3 years followed by 19.7% fall into 6 months-1 year and only 11.40% respondents were identified while having more than six month duration of relationship with their current telecom operators.

4.7. Descriptive Analysis

Descriptive statistics was performed to summarize and explain the main characteristics of the data sets of current study. It was conducted to obtain the general descriptions about the constructs used in this research. Therefore, through descriptive statistics, mean, standard deviation, variance minimum and maximum vales of mediating, moderating, independent and dependent variables were computed. The results of descriptive statistics are illustrated in the following table 4.5. Moreover, all the latent variables of this study were measured through five point Likert scales ranging from 1= strongly disagree to 5= strongly agree.

Table 4.4 shows that relational bonds (FB) has the lowest mean of (3.61), while corporate image has the highest means value (CI) with (3.96). Moreover, the entire values of standard deviations fall between the range of (0.59) and (0.82), which established the acceptable variability within the data set. The range of scale is between 1 to 5, with N = 539.

Table 4.4

Descriptive Statistics of latent constructs

Construct	No. of items	Means	Standard Deviation
Customer Loyalty	3	3.89	0.66
Service Quality	7	3.78	0.59
Price Fairness	3	3.71	0.66
Justice with Service Recovery	11	3.64	0.71
Relational Bonds	11	3.61	0.82
Customer Satisfaction	4	3.81	0.67
Corporate Image	4	3.96	0.64

4.8 Assessment of PLS-SEM Path Model Results

Current study has employed the two steps procedure of PLS-SEM to evaluate and report the outcomes of PLS-SEM paths as recommended by (Henseler et al., 2009). These two steps are Assessment of outer model and Assessment of inner model (Hair et al., 2011; Henseler et al., 2009; Wilson, 2010).

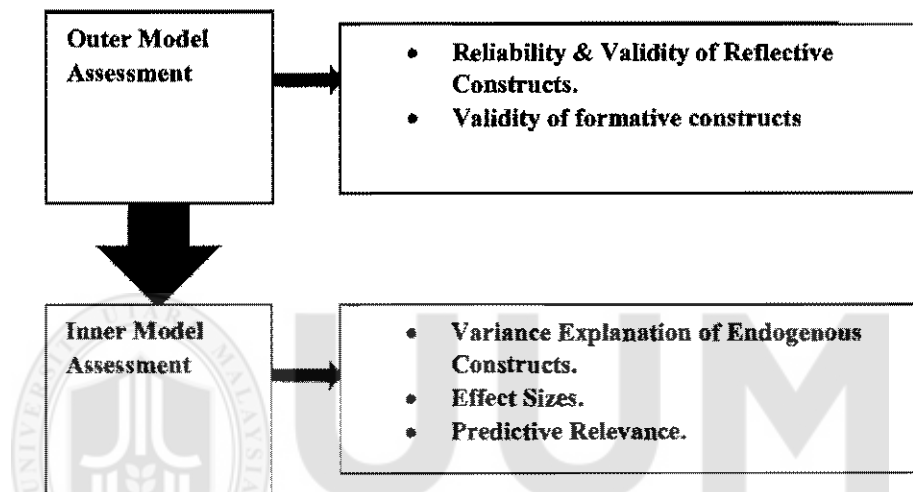


Figure 4.1
Two Step Process of PLS Path Model Assessment
Source: Adopted from (Henseler et al., 2009)

The PLS is applied in whole the study for the analysis of main, mediating and moderating constructs. The first step of using PLS-SEM analysis is the assessment of model, or also known as the outer model. The researchers argued that the main activates carried out in assessment of measurement model deals with indicator reliability, internal consistency reliability, convergent validity and discriminate validity (Hair, 2010; Hair et al., 2011; Hair Jr et al., 2014; Vinzi, Chin, Henseler, & Wang, 2010). The main objective of this step is to determine the goodness of measure through validity and reliability tests (Hair, Ringle, & Sarstedt, 2013; Ramayah, Lee, & In, 2011). Reliability tests used to measures the ability of the measurement

construct to measure the concepts consistently by following the rule of thumbs. While, validity test are used to measure the appropriateness of the constructs to measure the particular concept that it is designed to measure (Sekaran & Bougie, 2016). More particularly, the individual item reliability, construct internal consistency and construct validity are used to assess the outer model. In this study, the basic approaches preferred for PLS by Fornell and Larcker (1981) were used to measure the reliability, convergent and discriminate validity of the constructs used in this study.

Hair et al. (2012) argued that through stimulated data in PLS path modeling, goodness of fit is not an important parameter for the model validation because it did not detach the valid models from invalid models. Current study has employed PLS structural equation modeling while using the software application SmartPLS (Ringle et al., 2015) for estimating the theoretical model. This software is based on two multivariate techniques; factor analysis and multiple regressions (Hair, 2010). It is very imperative to configure the model for the easily recognition and understanding before conducting PLS-SEM analysis. In order to do this, constructs nature must be clearly declare in terms of reflective or formative. It is very important to note that determination of the nature of construct is very important because the measurement model of reflective constructs and formative constructs are different in nature (Hair et al., 2013; Lowry & Gaskin, 2014). In this study, perceived price fairness was reflective while perceived service quality and relational bonds were formative followed by perceived justice in service recovery as reflective formative construct. Furthermore, the analysis is based on the combinations of first order and second order constructs. In terms of the sequence of relationship among the construct used in this study, there are six exogenous latent variables including four independent variables (service quality,

price fairness, perceived justice in service quality and relational bonds), one mediating variable (customer satisfaction) and moderating variable (corporate image) while customer loyalty as the dependent variable.

Moreover, Hair et al. (2011) argued that the minimum acceptable loading of 0.4 and above is acceptable for measuring the reliability of indicators through factor loading. While, composite reliability is used to verify the internal consistency reliability of the measurement and the value of composite reliability must be equal to or greater than the threshold value of 0.70. The validity segment of the assessment of measurement assessment of PLS-SEM model based on the convergent and composite reliabilities (Chin, Henseler, Vinzi, & Wang, 2010; Hair et al., 2011; Hair Jr et al., 2014).

Convergent validity refers to the degree to which the interested measure of the study is related to the rest of the shared measures in the construct (Petter & McLean, 2009). In other words, convergent validity refers to establishment of efficient relationship between under reviewed scales and the validated scales that are believes to measures the constructs (Dmitrienko, Chuang-Stein, & D'Agostino, 2007; Petter & McLean, 2009). Moreover, Average Variance Extracted (AVE) is suggested to measure the convergent validity of the constructs with its thresholds value of at least 0.50 or above (Fornell & Larcker, 1981; Hair et al., 2011; Vinzi, Chin, et al., 2010). The convergent validity helps in predicting the valid scale that can be used for the measurement of model fitness. Therefore, there is much need to set appropriate parameters for detecting and deleting the factors that are not sufficient as per the criteria for the model's variance explanation (Hair Jr et al., 2014; Vinzi, Chin, et al., 2010).

Lastly, at the second stage of validating of measurement model, discriminate validity can be employed to determine the degree of consistency between the items in order to make sure the strength of the construct for determining the validity of the measurement model (Hair et al., 2011; Hair Jr et al., 2014). However, review of past studies suggested that the measured construct must be different from all the constructs or must not have any connection with other constructs of the study (Vinzi, Chin, et al., 2010; Wilson, 2010). Consequently, discriminate validity can be measured through the comparison of the square root of AVE with the rest of loading of each constructs with expectation of having the higher AVE value (Hair Jr et al., 2014; Vinzi, Chin, et al., 2010).

Furthermore, discriminate validity can also be verified through comparing the indicator or item's loading with the cross loading while ensuring that the indicators loading are higher than the cross loading values (Hair et al., 2011; Hair Jr et al., 2014; Vinzi, Chin, et al., 2010; Wilson, 2010). Importantly, table blow is detailing the threshold vales of indicator reliability, internal consistency reliability, convergent validity and discriminate validity for the assessment of measurement model (outer model) proposed by (Bagozzi & Yi, 1988; Hair, 2010; Henseler, Ringle, & Sarstedt, 2015; Henseler et al., 2009; Vinzi, Chin, et al., 2010).

Table; 4.5

Measures and threshold values for assessment of measurement model

Assessment subject	Measures	Threshold values
Indicator Reliability	Factor Loading	>0.4 or between 0.40 to 0.70
Internal Consistency Reliability	Composite Reliability	>0.7
Convergent Validity	Average Variance Extracted (AVE)	>0.5
Discriminate Validity	Fornell-Larker Criterion	The square root of AVE of each construct should be higher than its highest correlation with any other constructs.

4.8.1 Individual items Reliability or indicator reliability

Current study has measured the individual items reliability or indicator reliability through the assessment of outer loading of each construct in consistent with PLS-SEM procedure (Hair Jr et al., 2014). Moreover, Hair et al. (2011) proposed to retained the items having values 0.70 or above, otherwise delete the items scoring less than 0.70 values. On the contrary, Henseler et al. (2009) recommended a cut-off point 0.40; and argued that any items having score of less than 0.40 must be removed from the measurement model. In the similar vein, Hair Jr et al. (2014) argued that “ indicators with outer loadings between 0.40 and 0.70 should be considered for removal from the scale only when deleting the indicator leads to an increase in the composite reliability or the average variance extracted”. Therefore, based on the suggested threshold values, 12 indicators were deleted because of the poor loading as per the above mentioned criteria. Therefore, 42 items were retained in the model because they had loadings between 0.612 and 0.897 as shown in the table 4.6.

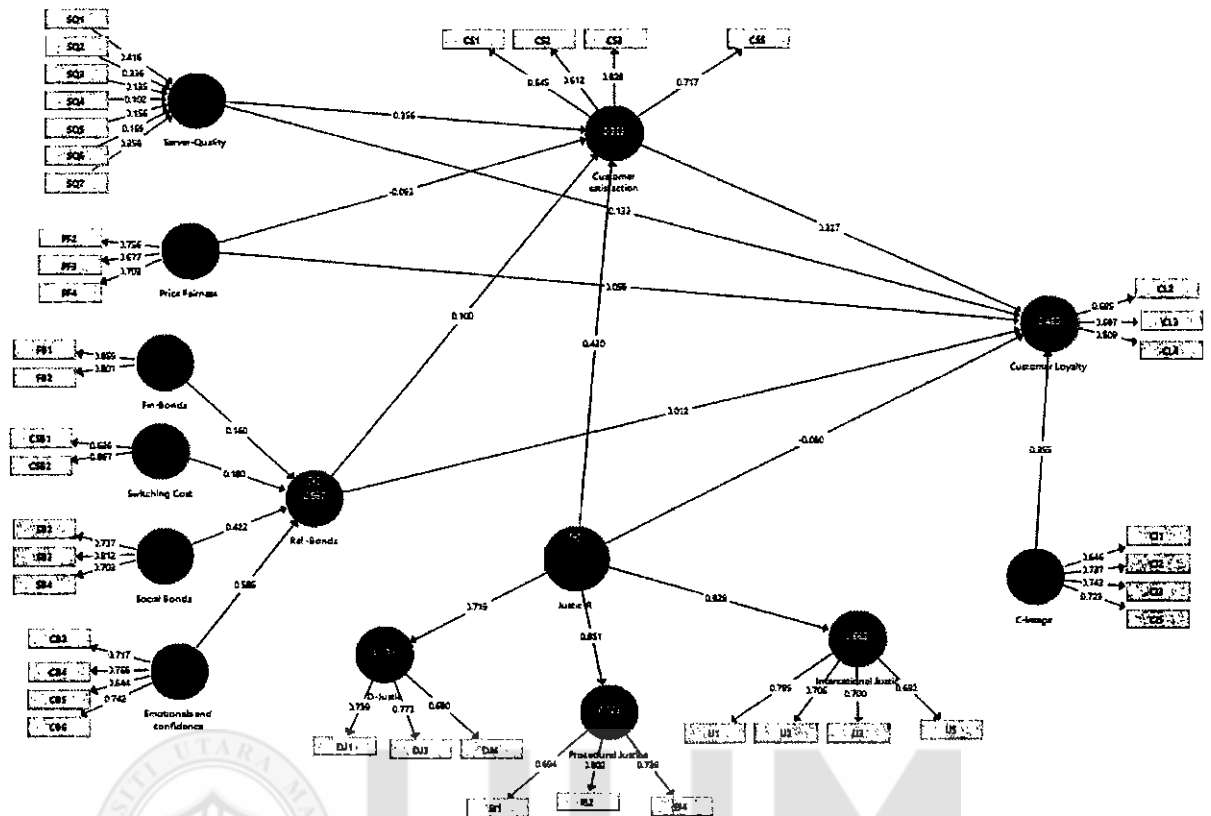


Figure 4.2
Measurement Model

4.8.2 Internal consistency reliability

Internal consistency reliability refers to the extent to which all of the particular scales are capable of measuring the same concept (Bijttebier et al., 2000; Sun et al., 2007). Internal consistency reliability statistic are used to for the measurements of reflective constructs only (Chin, 1998) In organizational research, Cronbach alpha and composite reliability are employed to measure the internal consistency reliability (Bacon, Sauer, & Young, 1995; McCrae, Kurtz, Yamagata, & Terracciano, 2011). However, composite reliability is considered the most reliable tool then Cronbach alpha based on the following grounds. First, CR coefficients provides less biased results than cronbach,s alpha because cronbach alpha assumed all the construct

equally regardless of their contributions in individual loading (Barclay, Higgins, & Thompson, 1995; Götz, Liehr-Gobbers, & Krafft, 2010).

Another justification of preferring CR is that Cronbach alpha normally under estimate or overestimate the scales reliability (Götz et al., 2010). Therefore, in the current study internal consistency reliability was measured through Composite Reliability (CR). Moreover, CR varies between the ranges of 0 and 1; and the threshold value preferred to be not less than 0.60 (Henseler et al., 2009), but values fall between range of 0.70 and above is more appropriate (Hair et al., 2012). In this regard, Table 4.7 established that the CR values of all the constructs of this study fall between the range of 0.75 and 0.86. Therefore, falling above the acceptable range of 0.70 (Hair et al., 2012). Hence, it is indicated that there is adequate internal consistency reliability between the latent constructs of this study (Bagozzi & Yi, 1988; Hair et al., 2011).

4.8.3 Convergent validity

Convergent validity refers to the extent to which the variables of the same construct are capable to represents the latent variable and is correlated with other variables of the same latent variable (Hair, 2007a; Henseler et al., 2009). By following the recommendations of Henseler et al. (2009) & Hair et al. (2012), in this study, convergent validity has been examined through average variance extracted (AVE) of each latent construct. AVE is computed as the means of variance extracted for the item loading on a construct. Meanwhile, in order to ascertain the convergent validity through AVE value, the recommended threshold value of AVE is 0.50 and above (Hair et al., 2012; Henseler et al., 2009) . The AVE value of 0.50 or above shows the ability of the latent variable to explain the half of the variance of its indicators and

therefore confirmed the adequate convergent validity (Hair et al., 2012; Henseler et al., 2009). Consequently, the values of AVE of all the constructs of this study fall between 0.50 to 0.69 ; so based on these results convergent validity is confirmed in all the constructs of this study.

Table 4.6
Items loadings, composite Reliability and AVE Values

First Order	2nd Order	Item	Loading	CR	AVE
Emotional and confidence		CB2	0.717	0.811	0.518
		CB4	0.768		
		CB5	0.644		
		CB6	0.743		
Switching Cost		CSB1	0.638	0.749	0.606
		CSB2	0.897		
Social Bonds		SB2	0.737	0.796	0.566
		SB3	0.812		
		SB4	0.703		
		FB1	0.859		
Fin-Bonds		FB2	0.801	0.816	0.689
D-Justice		DJ1	0.739		
		DJ3	0.772		
		DJ4	0.690		
Interactional Justice		IJ1	0.795	0.815	0.525
		IJ2	0.706		
		IJ3	0.700		
		IJ5	0.692		
Procedural Justice		PJ1	0.694	0.790	0.557
		PJ2	0.802		
		PJ4	0.739		
		D-j	0.719		
	JSR	I-J	0.828	0.843	0.642
		P-J	0.851		
		CI1	0.646		
		CI2	0.737		
C-Image		CI3	0.743	0.805	0.509
		CI5	0.723		
		CL2	0.695		
		CL3	0.697		
Customer Loyalty		CL4	0.809	0.779	0.541
		CS1	0.645		
		CS2	0.612		
		CS3	0.828		
Customer satisfaction		CS5	0.717	0.796	0.500
		PF2	0.756		
		PF3	0.677		
		PF4	0.703		
Price Fairness				0.755	0.508

4.8.4 Validation of Formative Constructs

The formative constructs are validated through the convergent validity, the valuation of co linearity among the construct items and the significance along with the relevance of formative items to formative construct. Consequently, redundancy analysis is performed to assess the convergent validity of formative construct. Perceived service quality and financial bonds are formative constructs of this study. Perceived service quality is based on 7 items ranging from SQ1 to SQ7. Whereas, relational bonds were consisting of 4 broad dimensions including Emotional and confidence bonds, switching cost bonds, financial bonds and social bonds consisting of 11 items.

In order to assure the significance of formative constructs (relational bonds and service quality) to the latent construct, Hair Jr et al. (2014) has purposed two conditions. Firstly, is to examine the non-linearity in the constructs through VIF. Whereas, the acceptable range is either 0.20 or more or less than 5 (Hair Jr et al., 2014). Secondly, to determine the significance of statistical contribution of all the items and constructs with the main concerning construct. Following table 4.8 illustrate the details of the treatment of formative scales used in this study.

Table 4.7 demonstrated the formative scales of relational bonds and service quality along with their weighted item scores, VIF scores and results of T Statistics-values. Since, VIF values (depicted in table 4.8) are less than 5 indicated the non-linearity issues in both formative constructs (i.e. relational bonds and service quality). Moreover, the outer Weight values of both formative construct are also referring the enough contribution to the main construct. Admittedly, outer weights of all the

formative constructs are above 0.1 threshold level as determined by Hair Jr et al. (2014), this surely confirmed their relative contribution towards the main construct (Hair Jr et al., 2014). Therefore, based on the above findings both the reflective and formative constructs used in this study are empirically valid and reliable for the further analysis.

Table 4.7

Outer weights, VIF, T-values of formative constructs

Variable	Items	Weight	VIF	T-Value
Fin-Bonds	Emotional and confidence	0.422	1.444	15.389
	Fin-Bonds	0.180	1.343	6.592
	Social Bonds	0.585	1.419	17.820
	Switching Cost	0.160	1.331	5.297
Service Quality	SQ1	0.416	1.361	5.432
	SQ2	0.336	1.344	4.814
	SQ3	0.135	1.613	1.607
	SQ4	0.102	1.495	1.379
	SQ5	0.156	1.381	2.129
	SQ6	0.169	1.269	2.394
	SQ7	0.358	1.154	6.466

4.8.5 Discriminate Validity.

Discriminate validity refers to the degree of variations between constructs. In other words, it can be referred to the degree of variations between all the latent constructs (Duarte & Raposo, 2010). Consequently, Hair et al. (2013) confirmed Fornell-Larcker criterion as the most convenient approach for the measurement of discriminate validity. Discriminate validity is affirmed when the AVE square root of every single construct is higher than the construct's highest correlation with any other latent construct (Hair et al., 2013; Henseler et al., 2009).

As a rule of thumb, the AVE score of square root of each construct must be higher than 0.50 (Fornell & Larcker, 1981). Hence, by following the Fornell and Larcker

(1981) basics principles, the discriminate validity was measured in this study. Following table 4.8 is based on the square route of AVE values against each construct used in this study. The bold square route of each constructs ascertains the highest value of this construct with any other construct. Thus, the value of each construct is higher than the 0.50 as well as higher than the other constructs so we can conclude that discriminate validity is established among all the constructs of this study.

Table 4.8

Discriminate validity Fornell-Larcker Criterion

	CI	CL	CS	JSR	PF	RB	SQ
Corporate Image	0.713						
Customer Loyalty	0.613	0.736					
C. Satisfaction	0.574	0.592	0.705				
P.J Serv. Recov.	0.627	0.498	0.693	0.800			
Price Fairness	0.450	0.367	0.367	0.533	0.712		
Relational Bonds	0.630	0.482	0.582	0.735	0.571	Formative	
P. Service Quality	0.649	0.562	0.661	0.669	0.487	0.613	Formative

Moreover, discriminate validity can also be measures by comparing the indicator loading with the cross loadings of each construct. The outer loadings were examined on the basis of 0.50 or above threshold value (Hair, 2010). Besides, outer loading greater than 0.40 and below 0.70 need careful attention and should be deleted only if their deletion will increase the values of CR and AVE (Hair et al., 2013). Therefore, by considering the above mentioned guidelines regarding item deletion, 12 items out 56 items were deleted. As clear fully mentioned through the bold item in table 4.8 that all the values of cross loading exceeds the threshold value of 0.50 and above. Furthermore, Hair et al. (2013) argued that examination of outer loading can also established the discriminate validity among the constructs. They further argued that discriminate validity will be confirmed when the value of outer loading on a construct

exceeds the value of cross loading then other constructs. Admittedly, table 4.9 revealed absence of discriminate validity in all the constructs of this study.

Table 4.9
Cross Loading

Items	CI	CL	CS	DJ	CB	FB	IJ	PF	PJ	SQ	SB	SCB
CB2	0.360	0.267	0.397	0.393	0.717	0.153	0.487	0.390	0.459	0.413	0.360	0.199
CB4	0.452	0.364	0.422	0.316	0.768	0.113	0.487	0.292	0.357	0.448	0.352	0.072
CB5	0.443	0.384	0.325	0.221	0.644	0.184	0.441	0.426	0.245	0.387	0.444	0.120
CB6	0.477	0.370	0.487	0.411	0.743	0.139	0.393	0.254	0.397	0.452	0.392	0.075
CI1	0.646	0.424	0.375	0.211	0.444	0.144	0.336	0.281	0.328	0.383	0.409	0.162
CI2	0.737	0.476	0.475	0.258	0.448	0.112	0.502	0.370	0.354	0.491	0.312	0.177
CI3	0.743	0.419	0.340	0.214	0.403	0.129	0.445	0.350	0.341	0.463	0.365	0.182
CI5	0.723	0.424	0.437	0.277	0.420	0.123	0.477	0.276	0.396	0.511	0.293	0.191
CL2	0.350	0.695	0.443	0.106	0.315	0.092	0.312	0.184	0.341	0.377	0.155	0.214
CL3	0.470	0.697	0.441	0.209	0.376	0.084	0.417	0.309	0.310	0.364	0.377	0.056
CL4	0.518	0.809	0.427	0.126	0.367	0.054	0.384	0.306	0.305	0.491	0.253	0.065
CS1	0.437	0.360	0.645	0.254	0.385	0.179	0.339	0.198	0.345	0.433	0.288	0.231
CS2	0.395	0.378	0.612	0.281	0.368	0.230	0.456	0.345	0.401	0.438	0.252	0.256
CS3	0.435	0.535	0.828	0.351	0.461	0.149	0.539	0.235	0.513	0.552	0.231	0.191
CS5	0.356	0.367	0.717	0.282	0.383	0.115	0.410	0.271	0.359	0.423	0.276	0.174
CSB1	0.107	0.014	0.211	0.317	0.066	0.373	0.091	0.161	0.244	0.179	0.032	0.638
CSB2	0.254	0.174	0.255	0.350	0.167	0.404	0.177	0.239	0.468	0.273	0.185	0.897
DJ1	0.163	0.078	0.261	0.739	0.311	0.372	0.115	0.163	0.372	0.205	0.111	0.347
DJ3	0.316	0.189	0.393	0.772	0.417	0.285	0.316	0.296	0.465	0.374	0.272	0.241
DJ4	0.244	0.160	0.249	0.690	0.291	0.410	0.296	0.284	0.345	0.235	0.209	0.358
FB1	0.152	0.092	0.195	0.397	0.211	0.859	0.134	0.241	0.345	0.192	0.110	0.388

Table 4.10 (continues)

Items	CI	CL	CS	DJ	CB	FB	IJ	PF	PJ	SQ	SB	SCB
FB2	0.143	0.077	0.197	0.396	0.122	0.801	0.161	0.150	0.240	0.151	0.111	0.429
IJ1	0.536	0.410	0.496	0.256	0.462	0.097	0.795	0.407	0.407	0.525	0.475	0.141
IJ2	0.490	0.407	0.476	0.283	0.499	0.114	0.706	0.385	0.322	0.484	0.428	0.035
IJ3	0.372	0.317	0.433	0.223	0.432	0.204	0.700	0.275	0.402	0.446	0.268	0.245
IJ5	0.388	0.332	0.411	0.230	0.429	0.098	0.692	0.326	0.379	0.433	0.197	0.103
PF2	0.413	0.325	0.269	0.168	0.338	0.110	0.368	0.756	0.320	0.379	0.351	0.172
PF3	0.249	0.184	0.301	0.316	0.340	0.233	0.318	0.677	0.335	0.323	0.346	0.214
PF4	0.281	0.265	0.216	0.274	0.335	0.185	0.343	0.703	0.276	0.333	0.297	0.180
PJ1	0.291	0.243	0.379	0.377	0.380	0.200	0.372	0.264	0.694	0.377	0.207	0.386
PJ2	0.414	0.364	0.557	0.448	0.340	0.331	0.399	0.277	0.802	0.429	0.125	0.364
PJ4	0.401	0.349	0.356	0.385	0.425	0.260	0.396	0.436	0.739	0.371	0.352	0.329
SB2	0.279	0.208	0.235	0.328	0.418	0.136	0.302	0.412	0.242	0.226	0.737	0.122
SB3	0.466	0.309	0.342	0.204	0.449	0.078	0.422	0.387	0.277	0.390	0.812	0.163
SB4	0.332	0.299	0.237	0.083	0.339	0.089	0.350	0.238	0.149	0.313	0.703	0.069

Source: Author

4.9 Assessment of significance of the model

The next step after the measurement of structural model was the valuation of structural model. By following the recommendations of Chin (2010), standard bootstrapping procedure was employed with 5000 bootstrap samples and 396 data cases to examine the significance of path coefficient. Furthermore, figure referring the moderation plot chart and table consisting of structural model assessment and estimating the full structural model with the mediation and moderation variables.

4.9.1 Coefficient of determination (R^2)

Coefficient of determination R^2 of endogenous latent variable is amongst the most adopted criteria for the assessment of structural model (Hair et al., 2013). Consequently, Cohen (1988) argue that R^2 values of 0.02, 0.13 and 0.27 designate weak, moderate and substantial R^2 values. In this regard, Results (refer to table 4.11) demonstrate that R^2 value of combined effect of entire exogenous variable on customer loyalty is 0.473 which is substantial while R^2 value customer satisfaction to customer loyalty 0.558 which is also highly substantial as per the criteria of (Cohen, 1988). The R^2 value is higher than the reported values of the other relevant studies of (Muturi et al., 2013) and (Ahmad et al., 2010; Irfan et al., 2016). Most importantly, the obtained R^2 values indicated that all the four exogenous variable combindly explains 47% variance in endogenous variable i.e. customer loyalty with respect to their direct impact. While, 56 % variance obtained on account of indirect effect of entire exogenous variables on endogenous variable through customer satisfaction in the model which is highly substantial. Therefore, R^2 values confirmed that the model of current study has the substantial predictive validity.

Table 4.10

R-Squared values vales for the latent endogenous variables

Endogenous latent variables	R-Squared value
Customer Satisfaction	0.56
Customer Loyalty	0.47

4.9.2 Assessment of Effect size (f^2)

Effect size refers to the difference in (R^2) between the main effects after elimination or presence of any particular exogenous variable in the model. The main purpose of assessment of effect size is to determine the impact of omitted exogenous variable on the latent endogenous variable. In addition, Hair et al. (2013) Has proposed to assess the effect size f^2 after the assessment of coefficient of determination R^2 of endogenous variable. More particularly, to determine whether omitted exogenous variable has the substantial effect on the latent endogenous variable (Hair et al., 2013). The following formula was employed to calculate the effect sizes of the entire constructs in order to determine the effect sizes in terms of no, small and large effect sizes ranging from 0.02, 0.15 and 0.35 respectively (Cohen, 1988). However, Chin (2003) argued that even the smallest f^2 can have a substantial effect on the endogenous latent variable.

$$f^2 = (R^2_{\text{included}} - R^2_{\text{Excluded}}) / 1 - (R^2_{\text{included}})$$

Following table 4.12 comprises of the construct wise effects sizes. The effect sizes of the entire constructs of this study are substantial. However, majority of the exogenous constructs have moderate effect on the endogenous construct. Therefore, the effects sizes of all the constructs are showing satisfactory status.

Table 4.11
Effect sizes f^2

Variables	Effect size	
SQ-CL	0.11	Moderate
PF-CL	0.08	Moderate
JSR-CL	0.01	Small
RB-CL	0.15	Moderate
SQ-CS	0.01	Small
PF-CS	0.01	Small
JSR-CS	0.00	-
RB-CS	0.01	Small
CS-CL	0.02	Small
CI-CL	0.15	Moderate

4.9.3 Assessment of predictive relevance (Q^2)

The study has further examined the predictive relevance (Q^2) which is another toll of structural model assessment. This assessment is obtained through Stone-Geisser test of predictive relevance followed by blindfolding procedure (Geisser, 1974; Stone, 1974). This test is applied to as an essential parameter to assess the model goodness of fit in partial least square structure equation modeling (Duarte & Raposo, 2010). Moreover, Sattler, Völckner, Riediger, and Ringle (2010) argued that blindfolding procedure is specifically applied when endogenous latent variables are reflective in nature. Consequently, all the latent variables of this study were reflective so blindfolding test was applied in this study to measure the predictive relevance of the model. In order to measure the predictive relevance of the model, a cross-validated redundancy measure (Q^2) was applied (Chin, 2010; Geisser, 1974; Hair et al., 2013; Ringle, Wende, & Will, 2010; Stone, 1974). Moreover, predictive relevance (Q^2) methods also measure the ability of model to deal with the omitted cases (Chin, 1998;

Hair Jr et al., 2016). Indeed, Research model having predictive statistics (Q^2) value greater than zero denote the predictive relevance of the model (Henseler et al., 2009). Therefore, higher Q^2 referred the higher predictive relevance of the model (Henseler et al., 2009). The results of predictive relevance are presented in the following table.

Table 4.12
Results of predictive relevance (Q^2)

Endogenous latent variables	Q^2 value
Customer Loyalty	0.246
Customer Satisfaction	0.235
Corporate image	0.257

The results exhibited in the above table presented the Q^2 results of three Endogenous latent variables of the research model are more than zero, hence, confirming the predictive relevance of the model (Chin, 1998; Henseler et al., 2009).

4.10 Hypothesis Testing

The confidence intervals of path coefficients were determined through the bootstrapping technique. The bootstrapping techniques uses the repeated random sampling with replacement from the original sample in order to create a bootstrap sample which eventually obtains standard errors for hypothesis testing. Consequently, bootstrapping was run on 5000 sample sizes by following the recommendations of previous researchers. Therefore, eleven out of fifteen hypotheses support the formulated hypothesis by using a significant level of $p < 0.01$ as shown in the table 4.14 and presented in figure 4.2.

Table 4.13
Direct relationship

Hypothesis	Path	β	S.D	t-value	p-value	Results	5.0 %	95 %
H1	PSQ \rightarrow CL	0.133	0.07	1.95	0.03	Supported	0.08	0.23
H2	PP F \rightarrow CL	0.059	0.05	1.10	0.14	Not Supported	-0.03	.015
H3	JSR \rightarrow CL	0.012	0.07	0.17	0.43	Not Supported	-0.19	0.04
H4	RB \rightarrow CL	-0.080	0.07	1.11	0.13	Not Supported	-0.11	0.13
H5	PSQ \rightarrow CS	0.361	0.05	7.65	0.000	Supported	0.26	0.42
H6	PP F \rightarrow CS	0.093	0.04	2.12	0.017	Supported	0.17	0.03
H7	JSR \rightarrow CS	0.430	0.06	7.31	0.000	Supported	0.01	0.19
H8	RB \rightarrow CS	0.100	0.06	1.72	0.043	Supported	0.34	0.53
H9	CS \rightarrow CL	0.327	0.07	4.83	0.000	Supported	0.22	0.44
H10	CI \rightarrow CL	0.355	0.05	6.341	0.000	Supported	0.26	0.45

Table 4.13 is detailing the results of the hypothesis in the direct relationship. Consequently, Hypothesis 1 was related to the positive association between perceived service quality and customer loyalty. Results revealed on table 4.13 and figure 4.3 have confirmed the significant positive relationship between perceived service quality and customer loyalty ($\beta = 0.133$, $t = 1.947$, $p < 0.026$) supporting hypothesis 1. Whereas, hypothesis 2 predicted that perceived price fairness does not have direct association with customer loyalty ($\beta = 0.05$, $t = 1.101$, $p < 0.136$) Hence, hypothesis 2 is not supported. In the similar vein, hypothesis 3 about the relationship between perceived justice with justice with service recovery and customer loyalty was also not supported based on the results shown in table 4.14 and depicted on figure 4.3 i.e. ($\beta =$

- 0.08, $t = 1.109$, $p < 0.134$). In examining the postulated effect of relational bonds on customer loyalty, results revealed insignificant relationship of relational bonds on customer loyalty ($\beta = 0.02$, $t = 0.169$, $p < 0.433$) yielding not- support to hypothesis 4.

The results of hypothesis 5 has confirmed a significant impact of service quality on customer satisfaction ($\beta = 0.356$, $t = 7.648$, $p < 0.000$) based on these findings hypothesis 5 was supported. As for the predicted relationship between price fairness and customer satisfaction in hypothesis 6, Results revealed significant positive impact of price fairness on customer satisfaction ($\beta = 0.093$, $t = 2.117$, $p < 0.017$) established support for the hypothesis 6. By following the same stream, the hypnotized relationship between perceived justice in service recovery and customer satisfaction revealed a significant Positive relationship through results ($\beta = 0.430$, $t = 7.310$, $p < 0.000$) demonstrated a support for hypothesis 7. While, With respect to hypothesis 8 which was about the association between relational bonds and customer satisfaction, results predicted in figure 4.3 and table 4.13 confirmed a fully support to the hypothesis 8 ($\beta = 0.10$, $t = 0.178$, $p < 0.043$) demonstrated a fully support to hypothesis 8. Whereas, in examination of the association between customer satisfaction and loyalty in hypothesis 9 results has confirmed a significant positive relationship between customer satisfaction and loyalty ($\beta = 0.327$, $t = 4.872$, $p < 0.433$) so in light of these results hypothesis 9 is supported. Similarly, results of the relationship between direct impact of corporate image on customer loyalty confirmed a significant positive relationship between corporate image and customer loyalty ($\beta = 0.355$, $t = 6.341$, $p < 0.000$) yielding support for hypothesis 10.

4.11 Testing Mediation Effects

Mediation test specifically conducted to confirm the intervening impact of mediating variable between independent and dependent variables (Ramayah et al., 2011). In other words, mediation tests are conducted to confirm the indirect relationship between exogenous latent variable and endogens variable through another variable. Hayes and Preacher (2010) Argued that mediation test can be conducted in multivariate analysis through several techniques, including; 1) through causal steps approach (Baron & Kenny, 1986) or through Sobel test (Sobel, 1982). 2) Some contemporary techniques which required more realistic statistical assumptions such as; 1) product distribution technique (MacKinnon, Lockwood, & Williams, 2004) and re-sampling techniques such as bootstrapping (Bollen & Stine, 1990; Preacher & Hayes, 2004; Shrout & Bolger, 2002).

In the current study, mediation test was conducted through bootstrapping approach which is the most widely used PLS approach for the mediation and moderation tests (Bontis, Booker, & Serenko, 2007; Chin, 2010; Hair et al., 2013; Hayes, 2017). Although, for the mediation analysis, Sobel test is still in use but is facing a lot of criticism on grounds of not adhering the basic assumptions of inferential statistics and that's why losing the popularity (Hayes, 2017; Zhao, Lynch Jr, & Chen, 2010). In fact, PLS-SEM technique was employed to tests the hypothesis of this study. Using PLS approach to test the mediation is a single step approach to measure the indirect effect of independent variable on the dependent variable (Zhao et al., 2010).

In social sciences, particularly in marketing related studies, mediation through PLS is gaining widespread popularity (Henseler et al., 2009) because of its ability to performed well even for the complex multivariate models comprising of direct,

indirect and interaction effects (Hair Jr et al., 2016). Furthermore, Hair Jr et al. (2016) argued that PLS enhanced the prediction of results involving large sample size, as of the current study. Mediation tests in PLS-SEM are evaluated through measuring the significance of path coefficients through bootstrapping. Whereas, according to Hair et al. (2013) actual mediation is performed through comparing the means of bootstrap analysis in tandem along with formulated hypothesis. Specifically, mediation tests of this study were performed to ascertain that whether customer satisfaction will mediate between the relationship of four exogenous variables (SQ, PF, JSR, and RB) and endogenous variable (LOY). Results of the mediation test are presented the following table.

Table 4.14
Results of Mediation Tests

Hypothesis	Path	S.Beta	St. Dev.	T Stat.	P-Values	2.50%	97.50%	Result
H11	PSQ→CS→CL	0.186	0.032	5.902	0.000	0.124	0.247	Mediation
H12	PF→CS→CL	0.056	0.028	2.038	0.042	0.113	0.009	Mediation
H13	JSR→CS→CL	0.287	0.042	6.882	0.000	0.208	0.369	Mediation
H14	RB→CS→CL	0.061	0.037	1.657	0.098	0.013	0.132	Mediation

P > 0.1*, P > .05**, P > 0.01***

Above table 4.14 is displaying the results of mediation impact of customer satisfaction on the association between service quality, price fairness, justice with service recovery and relational bonds to customer loyalty. Results (displayed in table 4.14) confirm the significant indirect relationship between service quality and customer loyalty (S.D= 0.032, t = 5.902, p <0.000) confidence interval value (UL 0.208 and UP 0.369). Therefore, Hypothesis H12, which predicted the meditational role of customer satisfaction in the relationship between service quality and customer

loyalty is accepted. While, hypothesis H13 which was based on the mediation role of customer satisfaction on the relationship between price fairness and customer loyalty is also accepted based on the results (S.D= 0.028, $t = 2.034$, $p < 0.042$) with confidence interval value (UL 0.113 and UP 0.009).

Regarding hypothesis H14, which was about the mediation effect of customer satisfaction on the relationship between justice with service recovery and customer loyalty, the results (S.D= 0.042, $t = 6.882$, $p < 0.000$) with confidence interval value (UL 0.013 and UP 0.132). Hence, the result has confirmed the significant indirect relationship between justice with service recovery and customer loyalty. In light of these results, H14 is supported. Moreover, H15 was about the mediation of customer satisfaction between relational bonds and customer loyalty was accepted (S.D= 0.037, $t = 1.657$, $p < 0.098$) with confidence interval value (UL 0.124 and UP 0.247). Therefore, results of H15 confirmed a significant indirect relationship between relational bonds and customer loyalty.

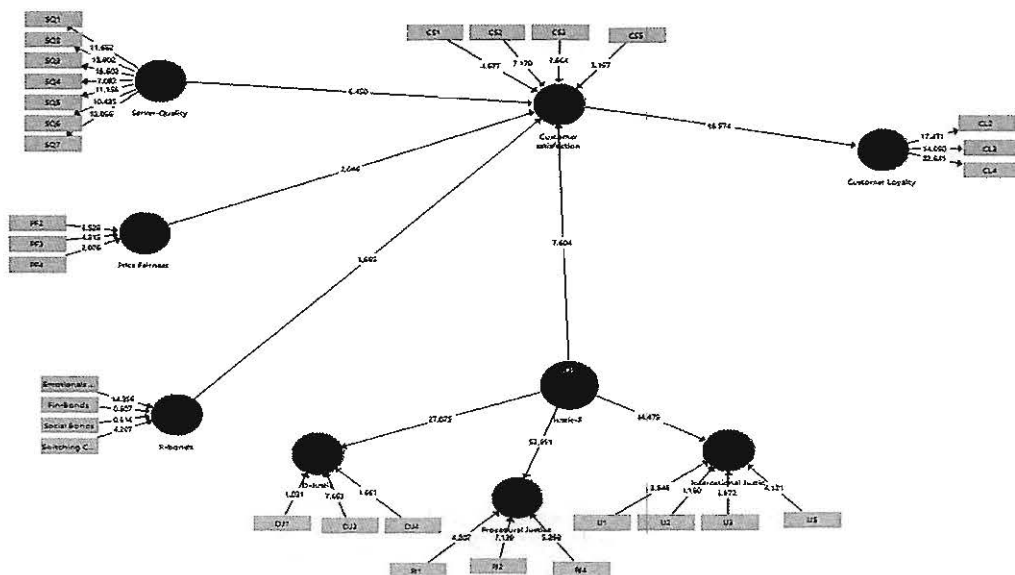


Figure 4.3

PLS-SEM Bootstrapping Indirect Relationship

4.12 Analysis of Moderation effect

In order to detect and estimate the strength of moderating role of corporate image into the relationship between customer satisfaction and loyalty, current study has employed product indicator approach through Smart PLS (Fassott et al., 2016; Helm, Eggert, & Garnefeld, 2010; Henseler & Chin, 2010; Henseler & Fassott, 2010). Moreover, Rigdon, Schumacker, and Wothke (1998) argued that in view of many scholars moderating variable is continuous variable in nature and product indicator approach can significantly predict its role in the underlying relationships. In the similar vein, Kenny and Judd (1984) argued that results obtained through product term approached are similar or even better than the group comparison based approach, and strongly recommended to employ product term approach for moderation analysis. So, in order to use the product term approach for testing the moderating effect of corporate image on the relationship between customer satisfaction and loyalty, product terms between customer satisfaction and the indicators of the latent moderator (corporate image) has to be created, Therefore, these interaction terms served as the indicators of interaction on the structural model (Fassott et al., 2016). Meanwhile, Cohen (1988) criteria has been employed to measure the strength of moderating role of corporate image through the effect size.

As shown in the table 4.14, as an independent variable, the relationship between customer satisfaction with customer loyalty was highly significant ($\beta = 0.327$, $t = 4.827$, $p < 0.000$) reported in table 4.14 as the acceptance of H5. Similarly, corporate image has revealed significant direct effect on customer loyalty (see table 4.14, $\beta = 0.356$, $t = 6.234$, $p < 0.000$), similarly, H6 was accepted. But, the interaction effects between corporate image, customer satisfaction and loyalty were revealed not-

for service quality, price fairness, relational bonds and customer satisfaction in relations to customer loyalty. Impact of Service quality on customer loyalty has revealed significant differences between stayers and switchers. Results confirmed a significant impact of service quality on stayers then on switchers as shown in results simultaneously for stayers, ($\beta = 0.2290$, $t = 2.322^{***}$) and for switchers ($\beta = 0.0030$, $t = 0.0310$). Hence, bases on the results H16 was deemed as supported .Whereas, H17 was surprisingly, statistically non-significant because of the no differences in perceptions between service quality and customer satisfaction structural relationship, dully verified through results i.e. stayer ($\beta = 0.3300$, $t = 4.675^{***}$) and switchers ($\beta = 0.3300$, $t = 4.675^{***}$). Indeed, Review of results verified that perception of service quality for the development of satisfaction loyalty is more advent for stayer then switchers. Likewise, significant differences were confirmed in the relationship between price fairness and customer loyalty link. Price fairness perception significantly affected the satisfaction and loyalty of switchers than stayers as shown in results, price to loyalty status of switchers ($\beta = 0.1120$, $t = 1.558^{**}$), price to loyalty status for stayers ($\beta = 0.0380$, $t = 0.4760$), price to satisfaction status of switchers ($\beta = -0.1170$, $t = 1.85^{**}$), price to satisfaction status of stayers users ($\beta = -0.0220$, $t = 0.4150$). Therefore, on the basis of above mentioned results, H18 and H19 were supported because of the observed differences between stayers and switchers. Nevertheless, no difference has been observed in relationship of perceived justice in service recovery to customer satisfaction and loyalty among stayers and switchers as verified through results i.e. perceived justice to customer loyalty relationship of stayers followed by switchers respectively, ($\beta = -0.0220$, $t = 0.4150$), ($\beta = -0.0220$, $t = 0.4150$). Perceived justice to customer satisfaction relationship of stayer followed by

switchers respectively ($\beta = 0.4690$, $t = 5.1450^{***}$), ($\beta = 0.3390$, $t = 4.3950^{***}$). Therefore, H20 and H21 were not supported.

Whereas, partially to no differences were revealed with respect to relational bonds to satisfaction while no differences were found on relational bond to customer loyalty status among stayers and switchers, dully verified through the results; relational bonds to loyalty status of stayers ($\beta = -0.1130$, $t = 1.287^*$), relational bonds to loyalty status of switchers ($\beta = -0.1260$, $t = 1.218^*$), relational bonds to customer satisfaction status of stayers ($\beta = 0.0820$, $t = 0.8870$), relational bonds to customer satisfaction status of switched-in users ($\beta = 0.1120$, $t = 1.527^*$). Hence, these observed differences in perceptions of stayers and switchers for relational bonds against customer satisfaction and loyalty links confirmed the supported status of H22 was rejected while H23 established statistically support. At last, significant differences were confirmed in the customer satisfaction and customer loyalty relationship, which provides a support of H24. While, no differences were revealed in corporate image and loyalty relationship among stayers and switchers empirically, confirmed dully confirmed from the results highlighted in table 4.17. Therefore, H25 was declared as non- supported (see table 4.16).

Review of PLS bootstrapping results referred significant differences between stayers and switchers regarding their perceptions towards service quality, price fairness, relational bonds and customer satisfaction towards customer satisfaction and loyalty. Only, perceived justice with service recovery and corporate image established no difference in the perception of stayers and switchers in relation to loyalty.

Table 4.16
Hypothetical differences between Stayers and Switchers

Hypothesis	Path	β (Stayer)	β (Switcher)	t- Values (Stayers)	t- Values (Switchers)	Stayer	Switchers	Differences
H16	CI \rightarrow CL	0.414	0.319	4.719***	3.981***	Supp.	Supp.	No
H17	CS \rightarrow CL	0.272	0.370	2.611**	3.994***	Part. Sup.	Full sup.	Yes
H18	JSR \rightarrow CL	-0.068	-0.082	0.696	0.804	Not Supp.	Not. Supp.	No
H19	JSR \rightarrow CS	0.469	0.339	5.154***	4.395**	Supp.	Par. Sup.	Yes
H20	PF \rightarrow CL	0.038	0.112	0.476	1.558*	Not Supp.	Par. Sup.	Yes
H21	PF \rightarrow CS	-0.022	-0.117	0.415	1.850**	Not Supp.	Par. Sup.	Yes
H22	RB \rightarrow CL	-0.113	0.126	1.287*	1.218*	Part. Sup	Par. Sup.	No
H23	RB \rightarrow CS	0.082	0.112	0.887	1.527*	Not Supp.	Par. Sup	Yes
H24	SQ \rightarrow CL	0.229	0.003	2.322***	0.031	Full Supp.	Not. Supp.	Yes
H25	SQ \rightarrow CS	0.330	0.442	4.675***	6.20**	Full Supp.	Full Supp.	No

Source: Author

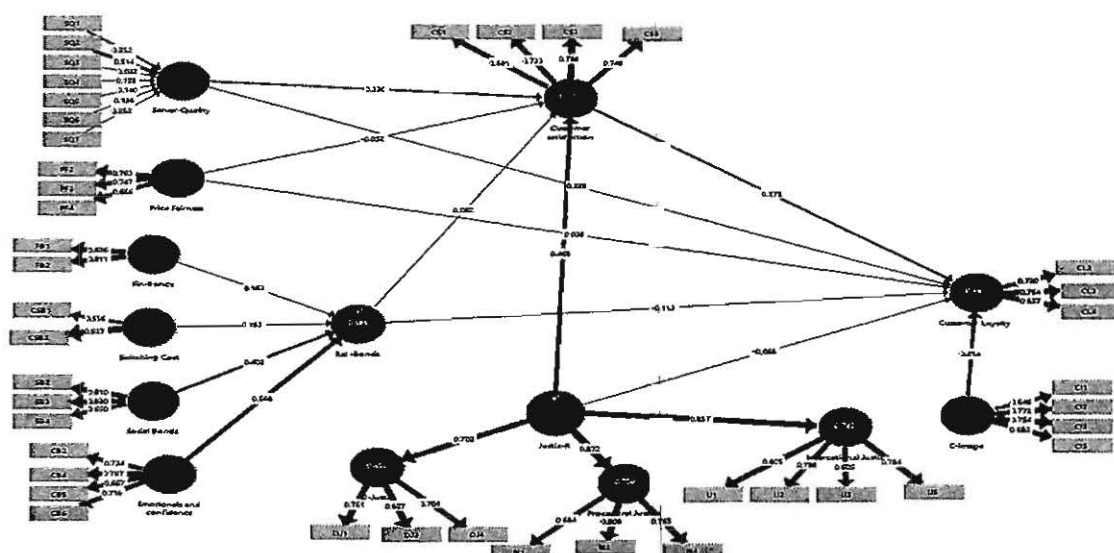


Figure 4.5
PLS-SEM Algorithm for Stayer users

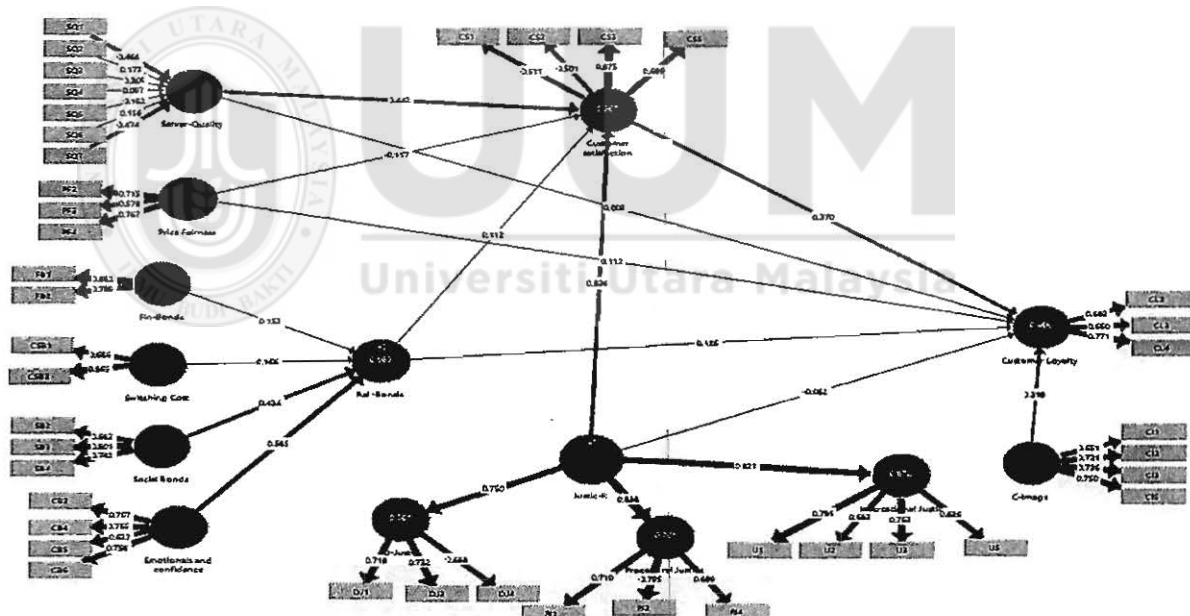


Figure 4.6
PLS-SEM Algorithm for switchers

The highlighted lines of figures 4.5 and 4.6 (for stayers and switchers) denote the differences in their perceptions towards various antecedents of loyalty. Furthermore,

table 4.17 stated the computations of differences in stayers and switchers perceptions through path coefficients (β) and (t) values against each predictors of customer loyalty. Hence, the review of results (referred to table 4.17) and examination of figure 4.5 and 4.6 detailed significant differences between two groups.

4.14 Summary

This chapter was based on the statistical analysis of data gathered through questionnaires from the prepaid subscribers of all the operators, collected from the customer care centers of four provisional capital cities of Pakistan. This chapter also presented the response rate statistics followed by the test of non-response biased, data examination and screening through missing value analysis and removal of outliers. After that, assessment of model results were determined through internal consistency reliability through convergent validity and discriminate validity, validation of formative constructs, cross loading. Then assessment of significant of model was measured through predictive relevance, assessment of effect size, R-squared value for the latent endogenous construct and coefficient of determination. Moreover , sample characteristics were reported followed by structural model and measurement model through PLS-SEM using SmartPLS 3.0 software (Ringle et al., 2015). Subsequently, results of the hypothesis were presented.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

5.1 Introduction.

This chapter presents the discussions, recommendations and conclusions about the results attained in the previous chapter. This chapter highlights the research finding in lieu of the literature review, research objectives, research questions and the hypotheses. It also presents a detailed discussion on the comparative study on observed differences between stayers and switchers have and highlight the theoretical, practical and methodological contributions of this study. This chapter also provides insights into the research limitations of this study and the future research direction are also addressed. Finally, Chapter ends with the conclusion of the study.

5.2 Executive Summary

This section highlights the results and findings reported in the previous chapter in line with the objectives of this study. The first objective of this study is to examine the direct relationship between six variables (SQ, PF, JSR, RB, and CS&CI) with customer loyalty. The relationship between the variables with customers' loyalty is hypothesized according to the research questions drawn from the literature review discussed in the previous chapter ranging from H1 to H6. Out of six hypotheses, three hypotheses have significant effects on customers' loyalty (H1, H5 & H6), while the remaining three hypotheses (H2, H3 & H4) have insignificant relationships with customers' loyalty and were not supported. In the meantime, the second objective of the study is to examine the relationship between four independent variables i.e. (SQ,

PF, JSR & RB) with customers' satisfaction. The results of the study confirm the significant positive, indirect relationship between four independent variables, reported as H7, H8, and H9& H10 with customer loyalty. Based on the significant indirect relationship, the entire four hypotheses (H7, H8, and H9& H10) were supported.

The third objective of this study is to affirm the meditational role of customer satisfaction into the relationship between SQ, PF, JSR & RB with customer loyalty. The results confirm that customer satisfaction successfully mediates the relationship between all four independent variables with customer loyalty. Therefore, all hypotheses (H11, H12, H13, and H14) were supported. Meanwhile, the fourth objective of the study is to examine the moderating role corporate image into the relationship between Customer Satisfaction and loyalty. The results establish the finding that corporate image does not serve as a moderator in the relationship between customer satisfaction and loyalty and found that corporate image has a highly significant direct effect on customer loyalty. Consequently, based on the result, H15 was not supported. Finally, the last objective of this study is to compare the differences between stayers and switchers with respect to perceived service quality and satisfaction, perceived price fairness and satisfaction, perceived service recovery and satisfaction, relational bonds and satisfaction, satisfaction and loyalty, perceived service quality and loyalty, perceived price fairness and loyalty, relational bonds and loyalty, customer satisfaction and loyalty, and corporate image and customer loyalty. All these relationships were dully hypothesized ranging from H 16 to H 25. Importantly, results confirm significant differences among stayers and switchers in their perceptions towards all antecedents of loyalty. Therefore, besides H17, H18,

H24, H25, all of the other hypotheses were accepted. Hence, out of the 25 hypotheses in this current study, 17 were accepted while 8 were rejected.

5.3 Discussion

This section discusses the findings of the study in the context of research questions, research objectives, hypothesized relationships, theoretical framework and underpinning theories. The subheadings in this section are structured according to the research questions and objectives.

5.3.1 Research Objective one: To determine the direct relationship between perceived service quality, perceived price fairness, relational bonds and customer loyalty

This present study predicts the direct relationship between the variables with customers' loyalty. There are four antecedents and two additional antecedents used to justify the intervening and interventional roles. Thus, there were total six antecedents of loyalty, including perceived service quality H1, perceived price fairness H2, perceived Justice with service recovery H3, relational Bonds H4, customer satisfaction H9 and corporate image H10. Out of the six hypotheses, three were supported (H1, H9 & H10) while three (H2, H3 & H4) were not-supported. Each hypothesis is discussed in the next subsection.

5.3.1.1 The relationship between Perceived service quality and Customers' loyalty (H1)

The direct effect of perceived service quality on customers' loyalty is stated through H1. Perceived service quality is referred to as a comparison between service

performance and customer expectation. H1 hypothesizes that perceived service quality has a positive relationship with customers' loyalty and this relationship is found to be positively significant. This empirical result is consistent with the findings of previous studies (Al-Zoubi, 2013; Aydin & Özer, 2005; Liu et al., 2011; Mokhtar et al., 2011; Muturi et al., 2013; Nimako, 2012; Oyeniyi & Abiodun, 2011; Santouridis & Trivellas, 2010; Tabaku & Çerri, 2015; Yuktanandana & Prasertsakul, 2015)/ Moreover, the similar significant relationship of perceived service quality with customers' loyalty was observed in the Pakistani telecom sector (Hassan et al., 2013).

This result has verified that service quality is the main predictor of customers' loyalty in the telecommunication sector, particularly in Pakistan. However, this is contradictory to the views of Rai and Srivastava (2012) who posited that cognitive elements are merely based on service quality rather on the brand itself. Hence, not surprisingly, service quality has gained much attention from scholars and practitioners over the past few decades (Santouridis & Trivellas, 2010). Consequently, service quality is amongst the most prioritized aspect in the telecom operators in Pakistan. This phenomenon is also evident that all the telecom operators have mentioned all the key components of service quality like network coverage & quality, value added services and customer care services even in their mission and vision statements. In addition to that these elements can be observed from the websites of these telecom operators where they have positioned all these elements in the most prominent places. Importantly, Pakistan telecommunication authority (PTA) has also bound the telecom operators to closely observe their service quality and to maintain it up to the satisfactory level (PTA, 2016).

In order to encourage telecom operators to maintain the desirable level of service quality, PTA has introduced Quality Awards for operators offering the best quality services (PTA, 2016). In this regard, Mobilink and Telenor are in constant head to head competition to get this award. Furthermore, Zeithaml et al. (1996) argued that in a highly competitive industry just like in the telecommunication sector, customers are dealing with homogeneous products or services and Service quality can serve as the main point of differentiation and lead towards customer loyalty. Thus, in this regard, service quality appears to be as the main predictor of customers' loyalty in Pakistani telecom sector. Most importantly, as stated in the first stage of four-stage loyalty model, perceived service quality significantly leads to cognitive loyalty (Oliver, 1999).

5.3.1.2 The relationship between Perceived price fairness and Customers' loyalty (H2)

H2: Perceived price fairness has a direct effect on customer loyalty.

The testing on hypothesis 2 showed that perceived price fairness does not have a direct effect on customer loyalty. The result of this study is consistent with other studies conducted in both the telecom sector (Hashim, 2014; Nazari et al., 2014) and non-telecom sector (Bassey, 2014; Virvalaite et al., 2009). However, the result is inconsistent with several studies conducted on the telecom sector (Adjei & Denanyoh, 2014; Hassan et al., 2013; Saha et al., 2016) and non-telecom sector (Asadi et al., 2014; Hanaysha, 2016; Marina et al., 2016). The relationship between perceived price fairness and customers' loyalty been discussed in numerous past works but most have produced inconsistent results (Bassey, 2014; Doong et al., 2008; Hashim, 2014; Hassan et al., 2013; Jin et al., 2016; Nazari et al., 2014; Virvalaite et al., 2009).

In the meantime, Pricing is one of the main element of the marketing mix which has a substantial effect on consumer buying behaviors (Kotler, Keller, Manceau, & Hémonnet-Goujot, 2015). It was argued that pricing of services is more difficult than the pricing of products due to aspects like tangibility, perish ability, separate-ability and transfer of ownership (Kotler, Armstrong, Swee-Hoon, Siew-Meng, & Chin-Tiong, 2017). Similarly, ensuring price fairness of services is more difficult than products because of their observed differences (e.g., Tangibility, Perish ability, Separate-ability and Transfer of ownership) (Matzler, Würtele, & Renzl, 2006). Perceived price fairness is an important variable and has a significant impact on acceptance, usage and future patronage decisions (Ogwo & Igwe, 2012). Furthermore, Yusuf (2018) argued that in the telecom sector, customers are more interested in tariff (price of call rates, SMS and other deals) than the price of purchasing the SIM card. Therefore, price fairness perception is more important and has a significant impact on customer repurchase or loyalty (Yusuf, 2018). This result also verified the findings of Yusuf (2018) and Adeleke and Suraju (2012) On Nigerian telecom sector where price fairness is negatively correlated with customer loyalty. In this regard, all operators in the telecom sector, are offering homogeneous services with or small price difference and this has caused the Pakistani telecom industry is operating in an intense nature where all the operators are competing head to head with each other by offering various packages and bonuses like talk time, SMS bundles and internet bundles. This situation has caused telecom subscribers to make impulsive decisions without considering and comparing the other viable options. Hence, it is important to conduct appropriate actions to maintain the fairness issues in the tariffs (Hamza, 2016).

5.3.1.3 The relationship between Perceived justice with service recovery and Customers' loyalty (H3)

The following hypothesis measures the direct relationship between perceived justice with service recovery and customer loyalty.

H3: Perceived justice with service recovery has direct effect on customer loyalty.

Perceived justice refers to the equitable treatment of service failures. Review of the past and recent studies has shown that perceived justice with service recovery is the most important predictor of customers' loyalty in both telecom and non-telecom sector. However, the result of this study established an insignificant direct relationship between perceived justice in service recovery and customers' loyalty. Similar to other significant predictor of customer loyalty, perceived justice with service recovery is gaining much of the attention, however, past works have reported inconsistent findings in both the telecom and non-telecom sector (Choi & Choi, 2014; Nor Sabrena Norizan, 2016a). The insignificant relationship between perceived justice in service recovery and customers' loyalty is congruent with the prior studies conducted in telecom sector (Choi & Choi, 2014; Nor Sabrena Norizan, 2016a) but the result is inconsistent with the findings of studies conducted in telecom (Bahri-Ammari & Bilgihan, 2017; Simpe et al., 2015) and non-telecom sector (Joosten et al., 2017; Migacz et al., 2017; Wang, Wu, Lin, & Wang, 2011). Therefore, based on the results, it can be concluded that perceived justice with service recovery is not a significant predictor of customers' loyalty. In this light, service failures are undoubtedly unavoidable in nature, but a good service recovery could efficiently minimize the effects of service failures. Moreover, having a large number of un-entertained complaints boast a sense of injustice in the telecom subscriber's mind and will turn

into negative word of mouth (Choi & Choi, 2014; Gull & Iftikhar, 2012) and customer switching (Gull & Iftikhar, 2012). All of which negatively affect customers' loyalty(e.g., Choi & Choi, 2014; Nor Sabrena Norizan, 2016a).

In the meantime, Pakistani telecommunication sector is dominated by the fixed line and mobile sector and the mobile service in Pakistan has entered its third decade. It was reported about 90 percent complaints are received against these two dominating sectors and mobile sector has recorded the most amount of complaints. Mobile service provides are increasingly bombarded with issue on service delivery increasing very rapidly where telecom subscribers are facing various problems like call dropping, misleading practices, billing issues and network problems (PTA, 2016).

Service failures have also minimized the organizational reliability to capitalize on customers' loyalty (Abbas, Abdullateef, & Mokhtar, 2015a; Mattila, 2001). Specifically, understanding the impact of service recovery on customers' loyalty is more important for the development of justice based service recovery and delivery system with respect to how much to invest for ensuring the reliable services (i.e. problem prevention) against providing justice based service recovery after the occurrence of problems (Hoffman et al., 2016). In light of this result, it is posited the telecom operators must ensure the justice in their service recovery processes.

5.3.1.4 The relationship between Relational bonds and Customers' loyalty (H4)

The fourth hypothesis of this study answers the first research question on the direct significant relationship between relational bonds and customer loyalty.

H4: Relational Bonds has significant direct relationship with customer loyalty.

Roberts et al. (2003) argued that “One strategy that has gained considerable attention is the strategy of relationship marketing in which firms invest in developing long-term bonds with individual customers.” He further mentioned that the objective of this strategy is just not limited to the attainment of customer loyalty; it will also make sure the sustainable competitive advantage because intangible features are pre-emptive in nature and therefore are hard to compete for the rivals. Moreover, Zeithaml and Bitner (2000) stated that relational bonds are specifically used for attainment of long term relationship and for close tie up with all the relational partners through maintaining the customer loyalty. Meanwhile, several scholars motioned that relational bonds can serve as “exist barriers” which prevent the customer to switch to other the service provider.

This finding contradicts the aforementioned finding as hypothesis 4 was rejected. This indicates that there is no insignificant direct relationship between relational bonds and customer loyalty. This finding is consistent with several previous studies focusing on non-telecom industry (e.g., Endang Prihatiningsih, 2016a; Narteh, Agbemabiese, Kodua, & Braimah, 2013; Shakerian et al., 2017; Shammout et al., 2006). A similar inconsistent finding was also reported in a conducted in telecom sector of kingdom of Saudi Arabia KSA (Nsour, 2013). In addition, the result on study on the direct insignificant relationship between relational bonds and customers’ loyalty contradicts the findings of various studies conducted in non-telecom companies (e.g., Anil Bilgihan et al., 2015; Lima & Fernandes, 2015; Sarwari et al., 2015; Shakerian et al., 2017) as well as the study conducted in the Sri Lankan telecom sector which proved that relational bonds are significant direct predictor of customers’ loyalty (see..Ragel & Newton, 2017).

Ahmad (2017) argued that by considering the nature of rivalry in the telecom sector, CMO must initiate the loyalty programs in order to remain competitive as well as to ensure the long-term relationship development through the attainment of customer loyalty. He further posited that all over the world, airlines, banks, retail outlet and mobile operators are successfully using their own customized loyalty programs. Loyalty programs have also been successfully managed by certain airlines and retail outlets in Pakistan. On the other hand, cellular mobile operators are indisposed in utilizing the loyalty programs because of the unpromising past results as a result, now the situation is totally changed and the fast pace of research in the field of customers' loyalty bring loyalty programs back into action focus. In this light, telecom operators in Pakistan can obtain the fruitful results from these loyalty programs (Ahmad, 2017).

5.4 Objective two: examine the relationship between perceived service quality, perceived price fairness and relational bonds to customer satisfaction (H5, H6, H7, and H8).

The fourth objective of this study is to examine the relationship between perceived service quality, perceived price fairness, perceived justice in service recovery and relational bonds with customer satisfaction. To investigate the structural relationship between the constructs, four hypotheses were established: including H5, H6, H7, and H8. This present study predicts that all the four paths were found to be supported. The following subsections will elaborate each hypothesis separately.

5.4.1 The relationship between perceived service quality and customer satisfaction (H5).the relationship between perceived service quality and customer satisfaction analyzed through the hypothesis H5.

H5: There is significant positive relationship between perceived service quality and customer satisfaction.

Mishra, Praharaj, and Sahoo (2016) argued that quality of services heavily depends on the customer satisfaction. He further argues that people judge the service quality from its ability to fulfill the customer desired level of expectations. The review of the past and contemporary studies have confirmed the significant positive relationship between perceived service quality and customer satisfaction in different sectors (Kant, Kant, Jaiswal, & Jaiswal, 2017). As hypothesized, the result of hypothesis H5 of this study is supported and this shows that perceived service quality has a significant relationship with customer satisfaction. Similar positive relationship between perceived service quality and customer satisfaction has been confirmed in previous studies on the telecom sector (Angelova & Zekiri, 2011; Ansar, 2015; Arokiasamy & Abdullah, 2013; Negi & Ketema, 2013; Olatokun & Ojo, 2016).

The results of this study signify that perceived service quality is the most significant predictor of customer satisfaction in telecom sector. The finding also supports Rind et al. (2016) who supposed service quality is a significant predictor of customer satisfaction in the Pakistani telecom sector, as well as the findings by Al-Hashedi and Abkar (2017), Phaneendra et al. (2016), Aydinli and Senyurek (2016), Makanyeza and Mumiriki (2016) and Irfan et al. (2016) which have conducted in the telecom sectors of various countries. In this regard, perceived service is reveal as the most significant predictor of customer satisfaction in the telecom sector.

5.4.2 The relationship between perceived price fairness and Customer Satisfaction (H6)

The following hypothesis analyzes the relationship between perceived price fairness and customer satisfaction in the Pakistan telecom sector.

H6: There is significant positive relationship between perceived price fairness and customer satisfaction.

Perceived price fairness refers to the perceived differences in the prices compared to the prices charged by the competitor in the same industry (Nazari et al., 2014). Perceived price fairness is more evident when the perceived differences among the prices are sound, adequate or justifiable. The review of the past studies reveals that price fairness is emerged as a significant predictor of Customer Satisfaction (Bassey, 2014; Malc et al., 2016). As hypothesized, perceived price fairness has positive significant impact on customer satisfaction. Therefore, these results support hypothesis H6. This result of is consistent with the results of previous studies of telecom in the telecom industry (Hassan et al., 2013; Malik, Ghafoor, et al., 2012; Mlekwa, 2014; Nazari et al., 2014; Shahzad Khan, 2012; Uddin & Akhter, 2012).

This finding also validates the results of previous studies by Hermawan, Basalamah, Djamereng, and Plyriadi (2017) and Senguo, Xixiang, and Kilango (2017) on the effect perceived price fairness and Customer satisfaction in Indonesian and Tanzanian telecom sectors. Moreover, Rothenberger (2015a) indicated that perception of price un-fairness is resulted in negative outcomes such as: customer dissatisfaction, negative word of mouth, lower level of repurchase behavior and increase in the number of complaints against the service providers. Thus, based on the above

research findings, perceived price fairness is revealed as the main predictor of Customer Satisfaction in the Pakistani telecom sector.

5.4.3 The relationship between perceived justice with service recovery and Customer Satisfaction (H7)

The structural relationship between perceived justice with service recovery and customer satisfaction is answerable through hypothesis H7.

H7: There is significant positive relationship between perceived price fairness and customer satisfaction.

Ha and Jang (2010) argued that Perceived justice in service recovery refers to the equitable and rationale based response to service failure. Telecom subscribers perceive a sense of unfairness after the incidence of service failure which leads to negative emotions (Chang & Chen, 2013; Kim & Jang, 2014). The effects of these negative emotions can be regulated through effective service recovery processes (Lin et al., 2011). As expected, perceived justice with service recovery has been found to have a significant positive influence on customer satisfaction in the Pakistani telecom sector. The finding of this structural relationship is in tandem with previous studies conducted in the telecom sector (Bahri-Ammari & Bilgihan, 2017; Ibrahim & Abdallahamed, 2014a, 2014b; Piaralal et al., 2015; Sabharwal & Soch, 2011; Vázquez-Casielles et al., 2010).

The awareness towards consumer rights has increased very rapidly in Pakistan. If a customer is not satisfied with the services of the operators, they will channel the

complaint to the concerned operators as well as to the third party in the case of unresolved complaints. Thus, customer satisfaction with service recovery is inevitable especially when customer feels equitable treatments through procedural justice, interactional justice and outcome justice (Chinedu, Haron, & Osman, 2017). This significant relationship between perceived justice in service recovery and customer satisfaction validates the findings of recent studies by Lee et al. (2017), Bahri-Ammari and Bilgihan (2017) and Simpe et al. (2015) on the telecom sectors in Hong Kong, Tanzania and Ghana. Thus, it can be concluded that there is a significant positive relationship between perceived justice with service recovery and customer satisfaction in Pakistani telecom sector.

5.4.4 The relationship between Relational bonds and Customer Satisfaction (H8)

The following hypothesis was developed to measure the relationship between relational bonds and customer satisfaction in the Pakistani telecom sector.

H8: There is significant positive relationship between perceived price fairness and customer satisfaction.

Turner (1978) defined bonds as “the psychological, emotional, economic or physical attachment in a relationship that are fostered by relationship and interactions, and that serve to bind parties together under a relational exchange”. In this regard, the long term survival of business is heavily dependent on the development of long term relationship with the customers. Firms can prolong their relationship by investing in the relational bonds to minimize layoffs. The review of the previous studies confirms a significant relationship between relational bonds and customer satisfaction. Hence,

as hypothesized, relational bonds have significant positive relationship with customer satisfaction. The result of this present study is consistent with a recent study conducted by Ragel and Newton (2017) in the Sri Lankan telecom sector and confirm a significant positive relationship between relational bonds and customer satisfaction.

This finding is similar to what reported by Salam (2014) on the Jordanian telecom sector. The author argued that mobile subscribers are likely to maintain the relationship with those operators who offers values and benefits to them in the forms free services, dipping costs, resolving problems, innovation in services social interaction etc. The important and significant role of relational bonds in building Customer satisfaction has also been highlighted by Ragel and Newton (2017) and Kotler (2017) which mentioned that “Mutually beneficial long-term relationships are built through relational bonds which provide customers with superior value and positively contribute to customer satisfaction”. This validates this finding.

5.4.5 Direct relationship between CS and CL (H9)

The following hypothesis is developed to measure the relationship between customer satisfaction and customers' loyalty in the Pakistani telecom sector.

H9: customer satisfaction has significant positive relationship with customer loyalty.

Sheth and Sheth (2017) argued that customer satisfaction is not a worldwide phenomenon and no one can obtain the same benefits or attained the same satisfaction levels from the analogous service experiences. This is due to the individual differences among the customer with respect to their past experiences, objective and needs that ultimately affect their expectations (Kotler et al., 2015). In this light, customers will only be satisfied until they perceive that products or services are

delivered based on their expectation. Customer satisfaction can be high or low and its solely depends on the comparative quality of products or services; high quality will lead to high satisfaction while low quality will result in low satisfaction (Alam et al., 2016; Gerpott et al., 2001). Nevertheless, customer expectation is never stagnant, so firms must measure customer expectation regularly to adhere to customers' expectation (Hutcheson & Moutinho, 1998; Santouridis & Trivellas, 2010).

As expected, satisfaction was found to have a significant positive influence on customers' loyalty in this study. This finding is in tandem with the past empirical studies conducted in the telecom sector (Aksoy et al., 2013; Danish et al., 2015; Karunanithy & Rasanayagam, 2013a; Khan, 2012a; Muhammad et al., 2016; Nasir et al., 2014; Tabaku & Çerri, 2015; Yuktanandana & Prasertsakul, 2015), as well as the works of Hafez and Akther (2017), Shafei et al. (2016), Karunanithy and Rasanayagam (2013b) and Ogbojafor, Ladipo, Ighomereho, and Odunewu (2014) on the relationship between customer satisfaction and loyalty in the telecom sector. The relationship between customer satisfaction and loyalty has also been empirically proved by recent studies conducted in the various telecom sector such as Verma and Singh (2017). The study has confirmed significant positive relationship between customer satisfaction and loyalty in the Bhutanese telecom sector. In the similar vein, studies conducted by Yusoff et al. (2017) and Morgan and Govender (2017a) which focused on the telecommunication sector in Malaysia and South Africa, affirmed the significant positive relationship between customer satisfaction and loyalty. Therefore, this study's finding regarding the significant direct relationship between customer satisfaction and loyalty in the Pakistan telecom sector has been validated.

5.4.6 Direct relationship between CI and CL (H10)

Hypothesis 10 (H10) was established to probe the direct relationship between corporate image and customers' loyalty in Pakistani telecom sector.

H10: corporate image has a significant positive relationship with customer loyalty.

According to Kotler et al. (2017), corporate image reflects the a firm's overall impression in the eyes of the public. Furthermore, Kim and Lee (2010) defined corporate image "as the perception of an organization that customers hold in their memories because it works as a filter through which a company's whole operation is perceived and it reflects a company's overall reputation and prestige". It was argued that corporate image is one of the significant predictors of customer loyalty. In this regard, H10 is supported indicating that corporate image has a significant, positive direct relationship with customers' loyalty in the Pakistani telecom sector. Consistent with a number of previous studies (Agyei & Kilika, 2014; de Leaniz & del Bosque Rodríguez, 2016; Hafez & Akther, 2017; Islam, 2010; Kaur & Soch, 2012; Quoquab, Basiruddin, & Rasid, 2013; Tabaku & Çerri, 2015), corporate image has been found to have significant direct effect on customers' loyalty in the telccom sector. The results of the study also verify the results of prior studies by Yee, Ling, and Leong (2015), Danish et al. (2015), Agyei and Kilika (2014), Quaye (2012) on the role of corporate image in the formation of customers' loyalty in the telecom sector.

5.5 Research objective three: To determine the extent to which customer satisfaction will mediate in the relationship of perceived service quality, perceived price fairness, and perceived justice with service recovery, relational bonds and customers' loyalty in Pakistan telecom sector.

The third objective of this study is to examine the mediating role of customer satisfaction on the relationship between perceived service quality, perceived price fairness, perceived justice with service quality and customer loyalty. To achieve this objective, the direct relationship between the mediator and dependent variable has been tested (H9). Consequently, four hypotheses were proposed and tested through bootstrapping method (Preacher & Hayes, 2008a). Therefore, hypotheses H11, H12, H13, H14 and H15 have been tested to determine the mediating role of customer satisfaction.

5.5.1 The Mediating role of Customer satisfaction into the relationship between perceived service quality and customers' loyalty (H11).

In order to find the mediation role, H11 which states that customer satisfaction mediates into the relationship between PSQ and CL in Pakistan was tested. As expected, the statistical results of H11 showed that customer satisfaction successfully mediates the relationship between PSQ and CL in the Pakistani telecom sector. This finding also verifies the results of previous studies pertaining to the meditational role of CS in the relationship between PSQ and customers' loyalty in the telecom sector (Akbar & Parvez, 2009; Alireza et al., 2011; Chang & Chong, 2011; Sarkindaji et al., 2015; Thakur & Singh, 2011). This study also supports the role of PSQ in the case of direct relationship with customers' loyalty (H1) and confirmed its significant positive direct relationship with customer satisfaction (H5).

This result statistically proved that PSQ is a strong predictor of customers' loyalty in both direct and in direct relationship. In regard to the significant positive results on PSQ, telecom operators must pay attention to all the elements of PSQ as it is well established that service quality reflects the standards of the telecom operators. This study has verified that in Pakistan, all the telecom operators provide excellent network coverage, value added service and work to ensure that all the standards recommended by Parasuraman et al. (1993) for the measurement of service quality. Moreover, this finding is parallel to Oliver Four Stage Model and successfully forming the cognitive loyalty through perceived service quality as suggested by Oliver (1999). The finding is also in line with the basic principles of the reciprocity theory (Falk & Fischbacher, 2006).

5.5.2 Mediating role of CS into the relationship between price fairness (PF) and customers' loyalty (CL) (H12)

H12 was formulated to confirm the structural relationship between CS, PF & CL in Pakistan telecom sector. In this regard, this study found that perceived price fairness does not affect the customers' loyalty directly (H2) but it has a direct and positive effect on customer satisfaction (H6). Interestingly, perceived price fairness has a significant impact on customers' loyalty through customer satisfaction. In other words, this relationship has a good magnitude and significant due to the meditational role of customer satisfaction as shown in Table 4.18. This indicates that customer Satisfaction significantly meditates the relationship between PF and CL similar to the findings of previous studies (Adeleke & Suraju, 2012; Chong, 2008; Estalami et al., 2007; Kaura et al., 2015; Rothenberger, 2015a). Therefore, H12 was supported. This finding also supports the Oliver 4 stage model which posits that price fairness leads

to cognitive loyalty (Oliver, 1999). This is parallel to the theories of justice and reciprocity which states that customers will stay loyal if they perceive justice in price fairness perception and vice versa (Falk & Fischbacher, 2006; McColl-Kennedy & Sparks, 2003). In addition, this result has verified the Expectation Confirmation Model.

5.5.3 The mediating role of CS into the relationship between perceived justice with service recovery (JSR) and customer loyalty (CL) (H13)

H13 was formulated to investigate the mediating role of CS between JSR and CL in Pakistani telecom sector and to attain the third objective. Remarkably, it was found that CS significantly mediates the relationship between JSR and CL in Pakistan telecom sector. However, JSR is found to have insignificant direct relationship with CL (H3) while JSR has a significant positive direct effect on CS (H7). As JSR is better explained through CS and loyalty relationship, H13 is supported. The finding shows that JSR has significant impact on CL indirectly through CS. Therefore, customers will perceive justice whenever they will satisfy from the procedural, distributive and interactional justice within the service recovery efforts by telecom operators, which in turn establishes customer loyalty.

The finding of the present study are also in tandem with the finding of previous studies (Abbas, Abdullateef, & Mokhtar, 2015b; Fierro et al., 2014; Nikbin et al., 2015; Primus, 2013b) on the mediating role of CS between JSR and CL. The results of this study justify the justice theory which argue that equitable treat of service recovery through procedural, interactional and outcome justice which lead to Customer satisfaction and loyalty (McColl-Kennedy & Sparks, 2003). This finding is also in line with the basic principles of reciprocity theory which states that a kind

response from the equitable perceived service recovery efforts from the telecom operators generates customer loyalty through customer satisfaction (Falk & Fischbacher, 2006)

5.5.4 The Mediating role of CS into the relationship between Relational Bonds (RB) and customer loyalty (CL) (H14)

To achieve research objective three, this study has also examined the meditational role of CS in the relationship between RB and CL. In order to accomplish this objective, H14 was tested to predict the mediating role of CS in the relationship between RB and CL in the Pakistani telecom sector. In this light, H14 was supported which confirm the meditational role of CS with RB and CL. Therefore, however, the direct relationship between RB and CL is insignificant; hence, H4 was not supported. Meanwhile, the results have shown the significant positive relationship between RB and CS, and H8 was supported. Thus, as predicted from the empirically results, RB significantly and indirectly influences CL in Pakistani telecom sector through CS. This finding is also consistent with past studies (Abubakar & Mokhtar, 2015a, 2015b; Gu et al., 2016; Ragel & Newton, 2017).

This finding also support the arguments given by Ragel and Newton (2017) and Salam (2014) in their studies on the Sri Lankan and Bangladeshi telecom sectors. These studies posited that operators can demonstrate their relational bonds perceptions through providing free services, extra talk time, reducing costs, promptly solving the problems, maintaining good social tie up, innovative service etc. Therefore, this finding demonstrates that relational bonds develop customers' loyalty only if they satisfy the customer first. Therefore, as verified by the empirical findings, relational

bond is mandatory for the attainment of customers' loyalty through customer satisfaction.

5.6 Objective Four: To examine the moderating role of Corporate image (CI) between Customer satisfaction (CS) and customers' loyalty (CL) (H15)

The fourth objective of this study is to examine the moderating role of Corporate image (CI) between CS and CL in the telecom sector in Pakistan. In order for accomplish this objective, H15 was formulated. Interestingly, we found that the interaction effect between corporate image, customer satisfaction and loyalty was not supported. Therefore, H15 was not supported. This finding is consistent with the study by Chung, Yu, Choi, and Shin (2015) but contradict the finding of (Irshad, Rahim, Khan, & Khan, 2017; Muturi et al., 2013; Quoquab et al., 2013) . However, corporate image has revealed significant direct effect on customer loyalty. Therefore, H15 was accepted. This has confirmed that corporate image is a the significant predictor of customers' loyalty in the direct relationship to customer loyalty. However, the interactional effect between corporate image, customer satisfaction and loyalty is insignificant as mentioned in Table 4.17. Therefore, based on the results, H15 was not supported.

The development of corporate image is not limited to delivering the superior values to the subscribers in the forms of excellent network coverage; value added services, fair prices, and equitable service recovery. It is also based on the perceptions about the organization, corporate communications and as grounded on the notable existence in newspapers, social media and blogs (Gouji et al., 2016; Thøger Christensen & Askegaard, 2001). In this regard, corporate image is the least considered factors compared to other determinants of loyalty, particularly customer satisfaction as

predicted from the interactional relationship between Customer Satisfaction, corporate image and customers' loyalty (H16). One possible reason is that corporate image is deemed as more significant in shaping the attitude of customer in fast food, banking and restaurant services. On contrary, corporate image established minimal impact on shaping customer attitude as telecom subscribers are not concerned with the corporate social responsibly initiatives and thus, have more preferences to other objective criteria for selecting any particular operators such as network coverage, value added services, extra talk time, customer support services etc (Gupta & Sahu, 2015). This is why the variability in the interactional relationship between customer satisfaction, corporate image and customers' loyalty was observed and hypothesized as H15. The similar phenomenon is also addressed by Islam (2010) in his study of the Bangladeshi telecom sector. This finding supports the Oliver Four Stage Model that states that corporate image has a significant direct impact on loyalty. In this regard, cognitive loyalty is formed in the third stage (Oliver, 1999), as predicted from the results of the significant direct relationship between corporate image and loyalty.

5.7 Objective Five: To compare the differences in perceptions between stayers and switchers with respect to PSQ and CS, PF and CS, JSR and CS, RB and CS, CS and CL, PSQ and CL, PF and CL, RB and CL, and CI and CL.

The fifth objective is to examine the differences between stayers and switchers towards each direct relationship. The similar approach has been adopted by Moreira, Silva, and Moutinho (2016) in their study on the Portuguese telecom sector using Levine's test of equality of variance. However, the current study is the pioneer in performing the differences through Multi-group analysis in SEM-PLS and proposing the two different models for the stayers and switchers, which provides useful insights

into each relationship. The structural relationship and differences between stayers and switchers will be elaborated in the following section. Thus, to examine the direct structural relationships, ten hypotheses, H16, H17, H18, H19, H20, H21, H22, H23, H24 & H25 were formulated. The details of each relationship are discussed in the following section.

5.7.1 Perceived differences in perceptions of Stayers and switchers for PSQ and CL relationship (H16).

The first direct relationship in this study is the direct relationship between PSQ and CL. As expected, the result confirms the significant differences between stayers and switchers with respect to their perceptions for the structural relationship between PSQ and CL in Pakistan telecom sector. Therefore based on the results, H16 was supported. In terms of the interpretation of the results, stayers are more concerned about the PSQ compared to switchers. These results are in tandem with studies conducted by Moreira, Silva, and Moutinho (2016) and Peng and Wang (2006) in which service quality significantly predicts loyalty among stayers. Moreover, both argued that perceived service quality attracts more to stayers' users than switched-in because stayers' users are more quality conscious than switchers, who are more attracted towards the other service elements such as price perception, bundle offers etc. In addition, the review of past studies on the general subscribers confirms the significant relationship between perceived service quality and customers' loyalty (Al-Zoubi, 2013; Hassan et al., 2012; Lee, 2015). In this light, significant differences between stayers and switchers have been observed in the relationship between PSQ and CL.

5.7.2 Perceived differences within perceptions of stayers and switchers for Price Fairness (PF) and Customers' Loyalty (CL) relationship (H17).

To achieve research objective five, the differences in perceptions stayers and switchers in the direct relationship between PF and CL was examined. Surprisingly, the result demonstrated the significant variations in the perceptions of stayers and switchers in the PF and CL relationship. Therefore, H17 was supported. Moreover, the result showed the significant impact of PF and CL relationship. It is therefore concluded that switchers are more conscious about the price fairness. This has significant impact on their loyalty towards telecom operators. The results of this study are in tandem with the finding of the studies conducted by Masih and Helmi (2017), Williams et al. (2011) & Peng and Wang (2006), in which switchers have shown significant relationship with customer loyalty. Moreover, the finding of this current study supports the arguments of Keaveney (1995) that price is one of the major causes for customer switching in the service sector. In addition, this finding justify the results of the various studies conducted on general subscribers (prepaid or postpaid) (Adjei & Denanyoh, 2014; Hashim, 2014; Hassan et al., 2013; Javed, Azam, Fazal, & Butt, 2013). In light of the finding of this study, telecom operator must be observant while devising the pricing strategies because these have considerable influence on switcher users.

5.7.3 Perceived differences in perceptions of stayers' and switchers for Perceived Justice in Service Recovery (JSR) and Customers' Loyalty (CL) relationship (H18)

This study has also examined the differences between perceptions of stayers and switchers in the context of the direct relationship between JSR and CL in the Pakistani telecom sector, as hypothesized in H18. The results demonstrate no differentiations in perception for the relationship between JSR and CL among stayers and switchers. Hence, H18 was not supported. The finding correspond the hypothesized direct relationship between JSR and CL of the current study (see Table 4.14), which establishes the direct insignificant relationship between JSR and customer loyalty. This finding confirms the results of the past studies conducted on the general telecom subscribers (Choi & Choi, 2014; Nor Sabrena Norizan, 2016a). In a nutshell, based on the stated results we can state that justified service recovery is more critical for the development of long term relationship through customer satisfaction and loyalty (Choi & Choi, 2014). Moreover, justice with service recovery can serve as the last resort to reduce customer defection/ customer switching" in a highly volatile industry (Migacz et al., 2017). Besides, total 10,237 complaints were received just during April-June session out of which, 31,21 complaints are related to PTCL and rest of 7,002 complaints belong to cellular mobile operators (CMO), which demonstrate the disquieting signs about the service recovery effectiveness of all the telecom operators (Atique, 2017), and is dully verified through the findings of this study. In light of the findings of current study, telecom operators should improve their service recovery process by following the basic principles of interactional justice, procedural justice and outcome justice.

5.7.4 Perceived differences in perceptions of stayers and switchers for relational bonds (RB) and customers' loyalty (CL) relationship. (H19).

In order to achieve research objective five, the differences in perceptions of stayers and switchers in the context of the direct relationship between RB and CL in the Pakistani telecom sector has been examined. Interestingly, slight differences in the perception of stayers and switchers could be derived from the statistical analysis in the context of the relationship between RB and CL in the Pakistan telecom sector. Therefore, based on these results, H19 was supported. The results of the present study also confirm the finding of the study conducted by Adiwijaya (2014b) which observed significant differences among stayers and switchers.. Therefore, this finding is very beneficial for the marketing practitioners, particularly for telecom operators. Moreover, this finding have justified the finding of other studies on the impact of relational bonds on customers' loyalty among general telecom subscribers (G.C. Pandey, 2014; Nsour, 2013; Ragel & Newton, 2017; Salam, 2014; Shukla, 2014). In this regard, recently,Ragel and Newton (2017) posited that telecom sector is operating in hypercompetitive environment and in such situation relational bonds can be served as the most significant predictor of customer loyalty.

5.7.5 Perceived differences in perceptions of stayers and switchers for customer satisfaction (CS) and customers' loyalty (CL) relationship. (H20)

Next, the direct relationship between customer satisfaction and customers' loyalty in context of the perceived differences among stayers and switchers in Pakistan telecom sector was examined. Surprisingly, slight differences have been observed among the

stayers and switchers with respect to their perceptions on customer satisfaction and loyalty relationship. Therefore, H20 was supported. Based on the results, we can predict that CS and CL loyalty relationship highly significant in switcher's perception while this relationship is not that much significant in the case of stayers users. The results of the present study are in tandem with other studies conducted on the stayers and switchers domains in various telecom sectors (Moreira, Silva, & Moutinho, 2016; Ragel & Newton, 2017). Undoubtedly, the divergence status of satisfaction among stayers and switchers leads to the contradictory behavior in the satisfaction and loyalty status for both. Therefore, telecom operators must take careful actions to increase the satisfaction of stayer users in order to ensure their continuous relationship with the current operator, as well as to avoid switching tendencies.

5.7.6 Perceived differences in perceptions of stayers and switchers for Corporate Image (CI) and Customers' Loyalty (CL) relationship (H21).

In order to meet with the objective five, H21 was formulated to examine the perceptions within stayers and switchers with respect to CI and CL relationship. However, it was revealed that there are no differences between both groups (stayers and switchers). Therefore, H21 was not supported. Surprisingly, the result of this study contradicts the finding of (Ulubaşoğlu et al., 2017) study on the Turkish telecom sector. The authors have observed the significant impact of corporate image in shaping the perceptions of switches and stayers towards their loyalty towards a telecom operator. However, the results of the current study are in tandem Peng and Wang (2006) study which showed that corporate image significantly influences stayers and switchers.

5.8 Perceived differences in perceptions of stayers and switchers for Perceived Service Quality (PSQ), Price fairness (PF), Perceived Justice with Service Recovery (JSR) and Relational Bonds to Customer Satisfaction (CS) Relationship. (H22, H23, H24, H25).

After addressing the perceived differences among stayers and switchers customers on the direct relationship between PSQ, PF, JSR and RB with CL, in the proceeding session, differences among stayers and switchers on the direct relationship between PSQ, PF, JSR and RB with CS have been addressed.

To begin with, in order to comply with the objective five, the perceived differences among stayers and switchers on the relationship between PSQ and CS in the Pakistan telecom sector were examined. Surprisingly, the finding in this study has revealed the significant positive relationship between PSQ and CS and no differences in the perceptions of stayers and switchers were observed. Therefore, based on the obtained results, H22 was not supported. These insignificant differences between PSQ and CS are consistent with the finding of the study by (Moreira, Silva, & Moutinho, 2016), that study has also revealed no differences in service quality status among stayers and switchers. Thus, this finding reveals the importance of perceived service quality and customer satisfaction relationship. Therefore, we can conclude that PSQ is significant predictor of CS in view of both stayers and switchers.

Next, the difference in the perceptions about PF and CS relationship was examined. As hypothesized, the effect of price fairness on satisfaction of stayer users is significantly different from Switchers. Therefore, based on this result, H23 was supported. This finding has verified that price fairness perception significantly

influences the satisfaction level of switchers then stayer users. The result of this study is consistent with the recent study by (Masih & Helmi, 2017) which reported that price fairness perception significantly influences the brand switching behaviors of switchers. Therefore, this finding helps the managers and more particularly practitioners to devise value oriented pricing policies for stayers and switchers.

In order to meet the objective five, differences in the perception about the JSR and CS relationship was examined. As expected, no difference is observed in relationship of perceived justice in service recovery to customer satisfaction among stayers and switchers. Therefore, H24 deemed as not supported. The results confirm that perception of JSR significantly affect the satisfaction level of both stayers and switchers in the telecom sector. Therefore, we can conclude that both groups have similar perceptions about JSR and therefore, it has significantly influenced the satisfaction levels of both customer groups. In light of this finding, considerable attention must be given to the service recovery services by the telecom operators.

Lastly, H25 was tested by examining the differences between stayers' and switchers' perceptions about the structural relationships between CL and CS. As hypothesized, significant differences are found in relational bonds to customer satisfaction status of both groups. Therefore, H25 was supported. Consequently, the result of this study revealed that relational bonds have significantly influenced the satisfaction status of switchers. The results of this study are in tandem with the previous studies by (Purwanto, 2013) in which significant differences have been found between stayers' and switchers. Surprisingly, RB is insignificant in the direct relationship with CL examined in the main study and has been hypothesized as H4, (see table 4.17). On the contrary, in the comparison study, RB has established significant relationship with

both CL & CS on the basis of empirically driven differences in the perceptions between stayers and switchers, hypothesized as H19 and H22 respectively (see table 4.17). Therefore, considerable attention must be given to devise relational bonds by offering them financial benefits, developing strong social ties, improving infrastructure as well as raising the switching costs so that subscribers cannot easily switch their mobile operators. Similarly, the review of comparison study has found significant differences among stayers and switchers in prepaid segment in relation to the various antecedents of loyalty.

5.9 Theoretical Contribution

The current study has several contributions, such as examining the complex relationship between various antecedents of loyalty through mediation and moderation analysis specifically in the prepaid market segment. Moreover, this current study is focuses on the most significant but least considered determinants of loyalty like relational bonds and Perceived justice with service recovery in lieu of their direct and indirect impact on customers' loyalty through the mediating role of customer satisfaction. In addition, the current study is the pioneer in the Pakistani telecom sector in particular, and telecom sector in general for examining the moderating role of corporate image. The current study has also enriched the existing literature of customers' loyalty in telecom sector by incorporating the Oliver's Four Stage Model with the support of Reciprocity and Expectation Confirmation Theory. Moreover, this study is the pioneer in examining the differences in the perception of two prepaid mobile subscriber's groups (stayers and switchers) about the various antecedents of loyalty. Importantly, the current study is also pioneer in proposing the two separate models for both customer profiles (stayers & switchers).

The outcome of this study has enriched the body of knowledge on customer satisfaction, corporate image and customers' loyalty while reinforcing the perceived service quality as the main determinants of customer satisfaction and loyalty in the Pakistani telecom sector. In addition, the study has validated the importance of perceived justice with service recovery, price fairness and relational bonds on customers' loyalty through the intervention of customer satisfaction. The finding prove that corporate image has direct impact on the formation of customers' loyalty but prove insignificant in interactional effect between customer satisfaction and loyalty relationship. Therefore, this finding contradicts the study of (Muturi et al., 2013) conducted in the Kenyan telecom sector where corporate image significantly moderates the relationship between customer satisfaction and customers' loyalty relationship.

One of the most important contributions of this study is examining the direct relationship of cognitive loyalty through perceived service quality on action loyalty, as well as the indirect relationship between cognitive and action loyalty through emotional and conative loyalty. Therefore, the study has followed and unfollowed the continuum simultaneously. On one side, the outcomes of this study revealed that the existence of loyalty component which in actual fact, needs not necessary to follow the suit in the continuum, particularly in the Pakistani telecom sector. This conclusion is drawn on the basis of observed significant impact of perceived service quality (Rahman, 2012) on customers' loyalty that can also showed that cognitive element can be significant in direct relationship with action loyalty. Similarly, the direct insignificant relationship between price fairness, perceived justice with service

recovery, relational bonds with customers' loyalty nullifies the direct relationship between cognitive and action loyalty.

On the contrary, the study has followed the continuum of indirect relationship between cognitive loyalty and action loyalty through the formation of emotional and conative loyalty. This finding was attained from the results of the study as perceived service quality, price fairness, perceived justice in service recovery; relational bonds were found significant influence on customers' loyalty through customer satisfaction. In additions p, customer satisfaction and corporate image were found to the direct, significant positive relationship with customers' loyalty (see table 4.17). Therefore, the outcomes of the study justify the theoretical underpinnings significantly. Consequently, the result strengthens the belief that loyalty is complex and in the current study, 52 % of its variance ($R^2=0.52$) is explained through customer satisfaction, corporate image, perceived service quality, price fairness, perceived justice with service recovery and relational bonds, reflecting the intensity of loyalty. As such, it is impossible to assume that it is linear, especially in a competitive industry like telecommunications where changes are rapid and fueled by the need for performance improvements to retain competitive advantages.

This study has also affirmed the role of customer satisfaction and corporate image in advocating customers' loyalty in the telecom sector. In addition, it was revealed that customer satisfaction is the significant predictor of customers' loyalty as the direct and intervening variable between PSQ, PF, and JSR & RB to customer loyalty. This validates that customer satisfaction is essential for the development of customers' loyalty in Pakistani telecom sector and if telecom operators are unable to satisfy the prepaid mobile subscribers through their perceived service quality, fair prices, fair

treatment in the service recovery followed by the attractive financial, social and structural rewards for the development of long term relationships through sustainable loyalty.

The current study has also validated the reciprocity theory, which is concerned with the customer intentions to stay longer with mobile operators based on their kind behaviors. To our best knowledge, this study is among the first that focuses on Pakistani prepaid mobile subscribers' loyalty intention towards their mobile operators. According to the Reciprocity Theory, people evaluate the performance of service providers from the perspective of their kind and unkind behaviors; they reward kind behaviors and punish unkind behaviors reciprocally. In this study, Reciprocity Theory is applied in terms of prepaid mobile subscriber's evaluations about perceived service quality, price fairness, and perceived justice with service recovery and relational bonds which is then reflecting their satisfaction and leading towards attainment of customers' loyalty or switching behaviors. This finding justifies the basic principles of Reciprocity Theory which enhance customers' perception on kind behavior leading towards their kind actions in terms of enhancing customer satisfaction, which ultimately results in the development of customer loyalty.

Finally, the finding in this study has also supported the Expectancy Confirmation Model. According to ECM, the attainment of customer retention or loyalty through the repurchase decision is based on the customers' own willingness that was shaped from the level of Confirmation Disconfirmation of the ability of the product or service to meet their expectations (Anderson & Sullivan, 1993; Oliver, 1980). Therefore, customer satisfaction will be more critical in the development of customers' loyalty under the ECM framework. In this regard, satisfied customer will more likely to stand

with the firm and more likely to remain loyal with the firms because of their prior satisfactory experiences with the firm (Anderson & Sullivan, 1993).

Finally, the comparison between stayers and switchers has significantly contributed to the body of knowledge on the telecommunication sector. Moreira, Silva, and Moutinho (2016) argued about dearth of study conducted on the difference in perceptions between stayers and switchers in the telecommunication sector. It has been noticed that previous studies have the tendencies to categorize the mobile subscribers as prepaid customers or postpaid customers while others considered them as homogenous groups. Few studies have investigated the prepaid and postpaid customer as heterogeneous groups and studied the differences in their perceptions about various antecedents of customer satisfaction and loyalty. Thus, this study filled in the gap by categorizing mobile subscribers in terms of their status as stayers and switchers. Moreover, the current study has filled this gap by thoroughly investigating the differences in the perceptions of stayers and switchers relating to the various antecedents of loyalty.

Moreover, the current study targeted prepaid subscribers because they represent 99 % population of telecom subscribers in Pakistan. Consequently, the finding of the this verifies the significant differences in the perceptions of stayers and switchers towards various loyalty constructs; significant differences have been observed in relationships between PF and CS, PS and CL, RB to CL, RB to CS, SQ and CL and CS and CL. As a result, stayers users are more inclined towards perceived service quality and corporate image while Switchers were more conscious about price fairness, relational bonds and perceived justice with service recovery. Besides, no differences in perceptions were observed in the relationships between CI and CL, JSR and CL, JSR

and CL, SQ and CS. Therefore, this finding will provide new insights in customers' loyalty literature from the perspectives of two emerging customer groups (stayers and switchers) which will serve as a base line for future researches in this domain.

5.10 Practical Contributions

The outcomes of this study provide a strong foundation for the planning and execution of loyalty initiatives to the practitioners, especially the cellular mobile operators, such as Mobilink, Warid, Telenore, Ufone and Zong in Pakistan telecom sector. This study sets a new direction for the planning and execution of strategic marketing plan from the perspectives of customer profiles (stayers & switchers) that limits the churning phenomenon and helps in rating the service parameters of telecom operators from the perception of various subscribers groups (stayers and switchers). Perceived service quality element is considered as the most significant predictor of customer satisfaction and loyalty in both the study settings. This sentiment is in line with Santouridis and Trivellas (2010) who highlighted the need to put more focus on service quality, mainly in the telecommunication sector because of prevailing teledensity rate and penetration rate where teledensity rate recorded in Pakistan was 72.4%. Based on this result, cellular mobile operators should strategize and invest more in the improvements of service quality of stayers, but at the same time, not ignoring the switchers.

Service quality can be improved by increasing the standards of service quality through improvements in tangible aspects of services like attractive offices, buildings, improvements in interiors & exteriors decor, ensuring reliable services by minimizing the likelihood of service failures, offer prompt service to the client with ease and providing individualized attention to clients. In addition, recent works have proposed

network quality and value added service as the major determinants of service quality in the telecom sector. Therefore, this current study has adopted the extended SERVQUAL scale for the measurement of perceived service quality. It is strongly recommended to provide the prompt service quality in the similar domains. Furthermore, in addition to Santouridis and Trivellas (2010) , other works (Boohene & Agyapong, 2010; Muturi et al., 2013; Nasir et al., 2014; Tabaku & Çerri, 2015) also showed the significant positive relationship between perceived service quality and customer loyalty.

This study has also highlighted the importance of attainment of customer satisfaction that serves as a bridge between the exogenous variables to form an endogenous variable, i.e. customer loyalty. This is in line with Irfan et al. (2016) who argued that telecom operators in Pakistan must make sure the customer satisfaction because of its direct link with the attainment of customer loyalty. Therefore, policy makers must consider customer satisfaction as the basic criteria for the determination of customers' loyalty in the telecom sector because of its empirically proven significant positive indirect relationship of all the constructs with customer loyalty.

This current study has also validated the growing importance of corporate image, more particularly, in the formation of customers' loyalty which is derived from the empirical results of current study. There is no doubt that the world has become the global village because of the advancements in information communication technology (ICT) and people are now much aware of the advancements in the communication networks and as well as they are using the multiple sources of communication to interact with one another. In such situation, just improving the basic services or even extending the value added services will not ensure their level of satisfaction and

loyalty with service providers. This has forced service providers to think out of the box. In relation to this, reviews of contemporary studies have recommended corporate image as another predictor of customers' loyalty in the service sector, particularly in the telecommunication sector. This notion on the direct relationship between corporate image and customers' loyalty is empirically verified by the finding of the current study, where corporate image has significantly influenced the satisfaction and loyalty status of both customer groups (stayers & switchers).

Mobile operators can establish the good corporate image through active participation in various philanthropic social activities like collecting donations, helping victims of mega disasters like earthquake and floods. They can also significantly contribute in education, health, as well as helping the government to improve infrastructure and in other social projects. Meanwhile, although cellular mobile operators are putting considerable attention towards these activities and formed a new corporate social unit to handle these issues more appropriate, still there is more room for the improvements in the corporate social responsibility domains, such as proper periodic audit report must be issued that critically appraises the parameters taken for the development of corporate image.

Bahjat El-Darwiche (2017) argued in a report titled "2017- telecommunication trend: aspiring to digital simplicity and clarity in strategic identity" published by "Strategy& research and analysis" that the telecommunication sector all over the world is reshaping because of the dominance of OTT (Over-The-Top Players). These players often have the resources to offer perks like free apps and streaming content through internet and therefore, their dominance is increasing very rapidly. Past works have further highlighted that these players are now getting more dominance in core

telecommunication service like messaging and voice services. More than 80% messaging traffic have already been dominated by WhatsApp, Viber, and Apple's i-Message services, and Skype contributing to one third traffic of voice international traffic. As a result, many telecom operators are facing significant decrease in their market share, 30 percent decrease in revenue from SMS, 20 percent decline in international voice traffic and 15% revenue decrease in penetration. This is evident in the Pakistani context, where VOIP (voice over internet provider) based alternative web provider such as WhatsApp, IMO and Viber offer excellent service quality.

Pakistan telecommunication limited PTCL (govt. owned land line telephone service provider) has launched EVO Wingle being "The country's first 3G hotspot in the shape of a USB modem, which packs a built-in Wi-Fi router in the most compact casing with a sleek & clean design and connects up to 5 Wi-Fi gadgets to high speed internet simultaneously". This service is available in almost 200 plus cities of Pakistan. Moreover, PTCL has launched a special WIFI service for their corporate clients in September 2014 named "Managed WIFI". These scenarios have put pressure on the cellular mobile operators to maintain their service quality, improve the network quality, innovation in value added service as well as increasing the standards of their customer care services through efficient service recovery.

In addition, telecom operators can maintain the customer satisfaction and loyalty by initializing relational bonds. It can be established through the initiation of various campaigns where the customers could be rewarded through different financial benefits such as a free SMS, voice calls or broadband bundle offers on the basis of their usage frequency. This method will not only encourage the telecom subscribers to earn the points but also provides a positive reason to interact with the professional relationship.

marketing managers. Consequently, this creates the opportunity of up-selling and cross selling of other services. Moreover, the outcome of this strategy will enable mobile operators to earn the desirable level of service quality KPI, as introduced by the Pakistan telecommunication authority (PTA, 2017) to maintain, as well as maintaining the quality standards of telecom operators.

As the country is moving towards social and economic digitalization, telecom operators must revisit their business strategy in order to meet the challenges of rapidly changing competitive landscape. Telecom operators must improve their overall infrastructure through state of the art IT based technologies. This is more evident because of the rapidly changing technological shifts in the telecom sector, huge shifts in the nature of rivalry because of the increasing dominance of OTT players which are more technologically sophisticated than telecom operators. There are initiatives like E-Customer care to provide customer care facilities with state of the art end to end digital amenities to reduce the costs and increase customers' satisfaction. Considerable attention must also be devoted to track customer purchasing patterns through periodic surveys and Recency Frequency Monterey RFM trends. Telecom operators must also establish partnerships with the other businesses like Financial services, IT services and media groups. Most importantly, considerable attention must be given to get rid of the out-dated infrastructures (Malik, 2017).

As the voice/text revenues have declined considerably and similar trends are expected in the upcoming years, telecom operators must focus on data marketing and establish new teams with "voice driven mindset" (Malik, 2017). Most importantly, more leverage must be given to improvements in the network quality through the 4G or 5G

technologies. Last year, the industry has observed some consolidated initiatives like merger of Warid with Moilink. This initiative adds values in the success of their business in the long run because these companies ally their technologies, networks, customer services and sales and distributions. In addition, telecom operators must make sure the price fairness is ensured While devising the pricing strategies (Malik, 2017).

Finally, as argued by Malik (2017) the China Pakistan Economic Corridor (CPEC) and its investments further provide greater opportunities for telecom operators. However, in-depth initiatives must be in place in order to effectively avail these opportunities. Additionally, the safety and security of the country is a key focus in this time and, to this end, greater reliance on technology is a key parameter. Hence, mega projects such as the 'Safe Cities' initiative continues to grow and telecom companies must have an efficient and effective business model with their partners to gain substantial benefits from these endeavors.

From the methodological perspectives, this study also has several methodological contributions. Previous studies on customers' loyalty domains have mainly used SPSS and or AMOS, but to the best knowledge of the researcher, limited numbers of studies have used PLS-SEM 3.22 for presenting the results by using the latest features. Moreover, very few studies have used the Multi group analysis (MGA) in conjunction with PLS-SEM to address group differences. Besides, this current study is one of the first to propose the two separate models for switchers and stayers, which will serve as a base line for the future researcher in this domain. Next, a large body of previous research has used non-probability sampling techniques which have many drawbacks like it produces biased results, misrepresentations of data and results and lack of

generalizability. Therefore, this study was able to address these limitations. Lastly, the model of current study is very complex and consisting of first order formative, reflective formative, reflective reflective and single order reflective domains, which will set a new directions for future research on the measurements using constructs in PLS-SEM.

5.11 Limitation of the study

The current study has provided the comprehensive roadmap for increasing the customers' loyalty in the Pakistan telecom sector. The framework of this study is based on six predictors of customers' loyalty including one mediator and one moderator variables. It involves prepaid mobile subscribers of Pakistan telecom sector. Most importantly, study has investigated the impact of predictors of loyalty on different customer groups (stayers & switchers). Customers' loyalty is very complex and dynamic in nature. Therefore, the factors or predictor shaping the customers' loyalty ought to change under the various situations, for example Recent, PIA,s 661 Airline crash on 7th December 2016, which has surely created an impact on customer loyalty in the Airline industry especially, PIA in domestic flights, despite the considerable promotional campaigns and various financial rewards. Here, as the telecom sector is operating in a hyper competitive environment and all the operators are involved in neck to neck competition. In such situation, it is more fruitful to generalize the finding of telecom sector by comparing it with other industries. In addition, the value of latent endogenous variable customers' loyalty is 52 percent which indicates that 48 percent of loyalty can be explained through other variables, thus, Other possible factors (switching costs, perceived value, commitment & trust) can be included in the future research.

The cross sectional nature of data also presents some limitations. As such, the data collected from the prepaid subscribers during a specific period of time and provides a snapshot about the customer evolutions to that time period. This characterizes the possibility of different finding under different time frames. Another probable reason lies in the context of this study conducted in Pakistan telecom sector and this finding cannot be generalized to the other developing and developed countries. So, future studies can be conducted in other parts of the worlds for better generalizability.

Moreover, there is also room existing for the comparative study in different geographical locations. As current study is based on the impact of predictors of customers' loyalty on two customer groups (stayers & switchers), future studies can add additional groups like heavy switchers (Moreira, Silva, & Moutinho, 2016), satisfied switchers and dissatisfied switchers (Gu et al., 2016), referral and non-referral switchers (Wangenheim & Bayon, 2004). Furthermore, the current study could guides researchers in conducting the studies in other hyper competitive sectors like banking, restaurant, airline, fast-food, B2B etc. with additional variables based on the contexts of the studies.

5.12 Conclusion

The main rationale of this study is to investigate the factors influencing customers' loyalty among prepaid subscribers in Pakistan. The findings of the study indicate that the level of customers' loyalty of the designated respondents is substantial. This finding will add to the body of knowledge pertaining to the importance of higher levels of customers' loyalty in the mobile phone operators. It also suggests that the managers of the telecom service provider should implement more coherent strategies

on customer loyalty, because of the proven phenomenon that retaining existing customers is more cost effective than attracting new ones.

The finding of the study suggests that four factors: perceived service quality, Customer Satisfaction and corporate image have significant influence on customers' loyalty while price fairness, perceived justice with service recovery and relational bonds has insignificant influence on customer loyalty. Provide managers and academicians a much stronger basis for recommending strategies to ensure high level customer loyalty. Therefore, it is imperative that mobile phone providers take extra effort to improve service quality, customer satisfaction and corporate image, particularly; careful attention should be devised to ensure price fairness, perceived justice with service recovery and effective bond strategies in their efforts to attain higher level of customer loyalty. A positive relationship exists between service quality and customers' loyalty which means that when customers have positive perception on service quality, subscribers continues using more of the services provided by the mobile phone operators. Another positive relationship is found between customer satisfaction and customer loyalty. This means that when customers are satisfied with their telecom operators, they use more of the services. When customers perceive a good corporate image of the telecom operators, it brings a positive impact on the consumption patterns of these customers. Hence, strong corporate image can increase customers' loyalty.

On the other hand, the current study found insignificant relationship between price fairness, justice with service recovery and relational bonding with customer loyalty. When customer perceives that the price is unfair, this will negatively affect their purchasing behaviors, they search for another operator who is offering similar service

in fair prices. The mediating effect of satisfaction on the relationship between all the independent variables and customer loyalty, it is found to be effective and hence supported. The insignificant impact of perceived justice with service recovery to customers' loyalty shows that telecom operators are unable to maintain the procedural justice, interactional justice and outcome justice with their service recovery and therefore this has impact on the customer loyalty. In addition to that, satisfaction mediates the relationship between: (a) perceived service quality and customer loyalty; (b) price fairness and customer loyalty; (c) perceived justice with service and customer loyalty, and (d) relational bonds and customer loyalty.

On the other hand, with respect to the moderating effect of corporate image, the link between satisfaction and customers' loyalty is not moderated by corporate image. This shows that it does not matter whether operator has a good corporate image; satisfied or dissatisfied customers' decision to quit or to remain loyal is not influenced by corporate image. The simple analogy here is that the action of the customers on whether to be loyal or otherwise is not moderated by corporate image. The results of the study also show significant differences in the loyalty perceptions among different customer groups (stayers & switchers). Stayers are more inclined towards perceived service quality. While, switchers are more triggered from price fairness, satisfaction, perceived justice and relational bonds. The finding of this comparison study helps the managers to devise the customized strategies in view of the perceptions of these customer groups.

The research findings have been discussed in line with the research objectives and findings of previous studies. The specific individual implications of the findings, as well as the general study implications are discussed to describe their significance in

the eyes of researchers and academicians. Other industries could also apply the model as an explanatory or auxiliary model for loyalty of customers in other sectors and generation. In summary, the current study provides important implications for practitioners, academic researchers as well as industries from the perspective of customer loyalty, particularly prepaid mobile subscribers of the Pakistani telecom sector.



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